

E06295

SIMPLIFIED COOKERY

SIMPLIFIED COOKERY

BY

MARGARET DODD SHIELL

*Honours Diploma in Cookery and Housecraft,
London*

LONDON

GEORGE ROUTLEDGE & SONS, LTD.

BROADWAY HOUSE : 68-74 CARTER LANE, E.C.

1932

**PRINTED IN GREAT BRITAIN BY
STEPHEN AUSTIN AND SONS, LTD., HERTFORD**

INTRODUCTION

MANY books have been written for the adult intelligence of the general public, or for the use of students in the Training Colleges for Domestic Science, but few books ~~seem available~~ for children. Now that Domestic Subjects form part of the Examination for the Secondary Schools such books are very necessary to the children for private study, and in our Senior Schools more time is now available for this knowledge (so essential to girls), and theory books are wanted to supplement the oral lesson. This book is, therefore, an attempt to convey essentials in the theory of Domestic Science to suit both purposes, in terms which can be understood by the average school child between 11 and 16 years of age.

To keep within an intelligent scope of the young child mind in subjects such as physiology, dietetics, and chemistry, where such do not form part of the ordinary school curriculum, rules out all involved technical terms, and in some instances strict veracity may have to be waived to keep within their comprehension. On the other hand, the correct term is taught wherever possible on the ground that a child can just as readily understand the term "protein", for example, as body builder. To teach a baby that a horse is a "gee-gee", means it must eventually learn that the animal *is* a horse, and with the same line of reasoning frequently children are compelled to learn two terms when *one* would suffice, and unless

they reach the stage of the second term, the first may be thoroughly misleading in after-life, therefore, although the long word may appear difficult, it has been inserted if it is to be of frequent occurrence.

As far as possible an attempt has been made to keep within the economic as well as the intelligent scope of the child. Although there are many fascinating devices now on the market to ease the burden of the housewife, in so many cases they are quite beyond the reach of the working-class housewife, employing that term in its widest scope. For the wealthier classes, housekeeping has become wonderfully simplified in the last decade, but the bulk of the children in our State schools are not drawn from this class, and will become the single-handed mothers of the future generation, and require training as such. Should Dame Fortune smile on them, the advertisements of the Press, or their own personal need, will teach them how to select labour saving devices which are more or less luxuries.

The subjects have been dealt with at length for the sake of the more intelligent or advanced school-girl, also to enable the book to be used over a period of school years as a study book, and in the hope that it may stimulate the curiosity to study more technical books later.

CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION TO COOKERY	I
	The Importance of Good Cooking. The Definition of a Cook. The Reasons for Cooking. The Ideal Kitchen. Cooking Stoves of Various Types. The Kitchen Furniture. Kitchen Apparatus and how to choose. Labour-saving Devices.	
II.	METHODS OF COOKING	54
	Various methods of Cooking Foods. Uncooked Foods. Marketing. Storing. Preservation of Foods. Tinned Foods. Food Poisoning.	
III.	CATERING	104
	The Difficulties of catering. Carving. Beverages. Special Catering Problems. The Vegetarian.	
	INDEX	145

SIMPLIFIED COOKERY

CHAPTER I

INTRODUCTION TO COOKERY

EVERY normal schoolgirl looks forward to the stage when she will become a member of the Domestic Science Class. You have probably heard from your friends who are a little older than yourself what fun it is to clean brasses at school, to make tarts and tiny puddings, and you are eager to try for yourself. What a surprise for the family at home when you make your first batch of good cakes, or what a nice surprise for mother when you offer to turn out the sitting-room !

Housekeeping can be most interesting and good fun, but like everything else it can only be done thoroughly efficiently when the brain is working as well as the hand. In a book I was reading the other day appeared this description of the mother : " Married life had soon appeared a drudgery that had used up mind and body. To cook things that will be eaten, so that you must cook again, to clean to-day what must be cleaned again to-morrow—what a thankless grind, especially when you don't know how to set about it." The whole key to the tone of that extract lies in the last nine words. The housewife who is unsuccessful is usually a person

who works with her hands only, and if she complains that the work is dull or drudgery, she has only herself to blame because she is not putting herself into it thoroughly. Because she does not understand the underlying factors there is nothing to keep her interested, for the only thing that keeps us really happy is to have brain and hand working in conjunction.

Let us first of all study the side of housekeeping involved in the preparation of food. A famous professor states in one of his books which you would enjoy reading when you are a little older, "food is an interest in life which begins earlier than any, and outlasts all others"¹ and how very very true that statement is! Whatever our position in life, the average girl is interested in *preparing* food, but to do so successfully, we must study the principles involved.

"The principles involved"—that means that we learn not only *how* to do a thing, but *why* we do it, and how the result we wish for is obtained.

THE IMPORTANCE OF GOOD COOKING

Good cooking is very important, for food so greatly influences all who partake of it. It is the foundation of all our work in life, and of those dependent upon us, for upon our food depends the health and energy of our body, and that is reflected in the daily work of all who partake of the meals prepared. An active brain or hand demands a steady supply of nutriment or it cannot work at its best.

¹ Mottram—*Food and The Family*.

The human body is frequently likened to a steam-engine, if the engine has inferior coal or material which it cannot use at all, it will not pull well. The same applies to the human body, it may keep alive, but it will not be doing the best work of which it is capable unless we give it the proper food, properly prepared. Mindful of this responsibility, it is necessary to study both the needs and tastes of those for whom the food is required, and with invalids and delicate people this care is of the very utmost importance, for without it we may actually be withholding the gift of health by our own hands.

THE DEFINITION OF A COOK

If you take a dictionary and turn to the word "cook" you will find the following definitions: "To dress for eating, as vegetables, etc."; "One whose occupation is to prepare or cook victuals for the table"; "To prepare as victuals for the table, by boiling, roasting, baking, etc." What an insufficient definition that seems to be, in the light of the previous paragraph. It occurs, unvaried, in several dictionaries, there is surely not the faintest doubt that it was so originally defined by a man! You will notice that the whole stress is placed upon preparation for *the table* (the appearance), no mention is made about the vital necessity of well-selected, well-prepared food for the individual the person is preparing it for! And that was about the whole idea of cookery until more recent times, to fill people up with food which looked nice, without any knowledge of the use of food in the body of the person who ate it, and so it was actually found that food might be

causing or aggravating disease, although the appearance on the table could have no fault found with it.

Since the days of that definition being sufficient, we have found out a great deal about the work of food after it has been swallowed, and why it is necessary to have food at all. If food may be appetizingly prepared, and yet an absolute source of danger to the person partaking of it, a cook can no longer be satisfactorily termed merely a person who can prepare victuals, she *must* understand something of the bodily requirements also, and becomes a highly intelligent, highly skilled worker, with a most interesting occupation.

THE REASONS FOR COOKING

There are numerous reasons for cooking food. Some of them are immediately obvious to the youngest child, but others require a really detailed study of food digestion, so we shall only take the reasons for cooking briefly here, and refer to them again at the close of the section.

To render mastication easy.—Many hard foods are softened, or broken, by cooking ; e.g. rice.

To help in the process of digestion.—This reason you will follow more easily when you have done some work on digestion, and for the present you must leave alone.

To purify and preserve the food.—The atmosphere around us contains innumerable forms of germ-life too small to be visible to the naked eye, but none the less active in destroying our food supplies in

order to obtain their own. Heating invariably helps to destroy these active little agents, and so, according to the amount of heat to which our food is subjected, it is more or less purified and preserved by the action of heat.

To combine the right foods in the correct proportion for the needs of the body.—This you will understand later.

To render the food agreeable to the taste and the eye.—The appetizing appearance and smell of food causes a reaction upon the juices which digest our food, so that they flow more freely than would otherwise be the case. To say that your mouth waters at the smell of good food is stating a fact you are well aware of, only it is not water, but a digestive juice, which flows into the mouth in anticipation of the food you hope to receive, and the same thing is happening in the stomach and other parts of the digestive system.

To blend flavours.—A typical example of this is soup. You would not relish a few pieces of raw vegetable and a drink of water in place of the delicious soup your mother can make from those same ingredients. This is a very important reason for cooking, and to understand the correct blending of flavours and foods is one of the chief distinctions between a good and a bad cook, for no one can be properly nourished on tasteless food.

To add variety to our food.—Just as no one can be properly nourished on tasteless food, neither will a monotonous diet, though it may be quite satisfactory in every other way, keep people healthy. The same

ingredients may be used, but they must be frequently regrouped to obtain endless variety.

To warm the food.—When we partake of cold food heat is drawn from the body to bring it up to the same temperature as the body. This is a strain on the stomach, to some extent, and can be saved by previously heating. Cold food is somewhat like putting slack on a fire. It will burn up red and hot in time, but when first added all heat is destroyed until the slack has become hot and glowing. If you want to refresh a person immediately, therefore, give them warm, and not cold, food and they will find the benefit of it.

THE IDEAL KITCHEN

Very few people are fortunate enough to possess an ideal kitchen. Many of the better modern houses have greatly improved this room of the house, but even in the new houses, in thousands it has been built smaller than ever, and there are, also, the many older houses all possessing tenants. However, some hints may be useful if we cannot dictate all that we would like to see.

The Position.—

1. There should be good lighting and ventilation. Hot, foul air will collect near the ceiling, and the top portion of the window should open easily without causing a draught. It is usually very draughty if in a direct line with a door.
2. Well-fitting doors, and as few as possible to

avoid draughts, and a cold floor in the winter. An outer door facing north-east is generally the source of a cold, draughty kitchen, unless very well-fitting. Always keep the door closed, which will prevent smells from the kitchen penetrating to other parts of the house.

3. It should be easily accessible for the service of food to other rooms. Long passages cause unnecessary work in carrying heavy weights, and food to go cool in transit.

4. Avoid steps from the kitchen to any other frequently used room. Basement kitchens are seldom built nowadays, but there are still plenty in existence, and they make the house exceedingly tiring to work. Apart from these, however, one frequently finds two, or even three, steps from the kitchen to the dining-room, passage, or scullery, and they are a very heavy strain on the worker. Sometimes one step can be overcome by the fitting of a gently sloping board, and this is good as it requires far less exertion from the person frequently traversing it, than the effort required to lift or lower the body continually over a step.

5. Do not have the sun on the kitchen walls or window for the greater part of a summer day.

6. When equipping, have as many good labour-saving devices as you can afford, after buying real necessities.

Many of these points are at the option of all, even to-day, when it is so difficult to obtain houses. Frequently there is a choice, as in the case of a row of new houses, and a great deal may depend upon which side of the road, or pair of houses, in view of the above points.

The Floor.—The substance forming the floor varies greatly according to the locality, and nothing looks nicer than the mosaic or tiled floors already laid in some districts. If these are not available, a good linoleum is the most suitable covering, as it is easily cleaned and impervious to water. Avoid plain colours, as they show every mark, but a marbled surface in a light colour is always very satisfactory, or a pattern should be chosen which will fit in with the general colour scheme adopted for the room.

The Ceiling and Walls.—The best cheap material for kitchen walls is undoubtedly distemper, as it is hygienic, and easily renewed. This does not mean that the kitchen need not be an attractive room. It is one of the most important rooms in the house, for it is the workshop, and many hours must be spent in it daily. It seldom costs more to have an attractive colour than a dull one. The ceiling should be a light colour, but need not necessarily be white. A pale buff looks very attractive, gives good radiation and reflection of light, and certainly looks clean longer than white. With this, endless variety of pretty colours might be suggested for the walls, with the buff carried out again in the woodwork. Remember the effect of colour on the natural light available for the room. Even a dull room can be charmed into an attractive one if proper care is taken.

The Woodwork.—Remember that much of the dust in the kitchen is of light colour, from ash, flour, etc., and will show less quickly on light than on dark paint. Dark polished surfaces should be avoided in the kitchen woodwork, as they do not save work, but entail endless dusting, and the

occasionally more frequent cleaning required by the lighter paint is far less fatiguing and more hygienic.

The Curtains.—These should *always* strike a bright, cheerful note. With the tablecloth, it is usually the only soft furnishing in the kitchen, and there is not a deal of it, so that bright colours can be allowed without appearing harsh or crude, and they also will certainly resist the dirt better than white ones, a consideration for the busy housewife. Precaution should be taken to be sure of securing a colour which can resist strong light and sunlight without fading. There are many such fabrics on the market now, and it is one of the cases where it is worth the few pence extra at the time of purchase so as to avoid “shabby” curtains for the greater part of their life.

The Drains.—The drains should be well inspected, especially in old houses, to see that they are easily accessible for cleaning and of the correct type to prevent smells rising. The grid at the top may be missing on the sink, or deeply sunk in the sink, when it is most difficult to clean; this trouble can now be remedied by fitting the loose aluminium grids, costing only a few pence. They should also be inspected outside, and if open to collect leaves from a near-by tree a piece of wire should be fitted as a cage, or the grid may be missing here also, which will cause not only outside obstructions to blow down, but the loss of soap, etc., by careless people, which may cause a stoppage of the drain entirely. All these little points greatly concern the person using the sink drain continually. A little boiling soda water poured down daily, followed by a good

flushing with hot water will keep them clean, and prevent them from becoming choked by accumulated grease from water used for washing-up, etc., coating on the cold sides of the pipe as it passes down ; and a little disinfectant should be put down weekly.

The Sink.—These are fixed at varying heights, which are often incorrect for the worker. If the sink is too high, a light foot-rack on the floor will often make all the difference to the comfort of the worker, besides keeping the feet warm and dry, or if it is too low, the same can easily be fitted in the sink on small rubber feet. These boards are very useful in the sink in any case if there is room for one, as hard wood is less easily scratched than the bottom of the sink, and they protect the glaze. Very few stone sinks now remain, and the porcelain sinks have certainly greatly helped the housewife.

The Taps.—Very frequently they are still fitted with the brass tap which requires so much labour to keep clean. The new sheathed tap is far simpler to clean, and if of chromium-plating does not mark with the water. The painting or enamelling of sink taps is not a very satisfactory process, as they receive such hard wear it soon wears off or becomes chipped. There should always be a good draining-board fitted to the sink, if not they can now be purchased to slip on the end of the sink when in use, and lift off if required. Plate racks are not used in all parts of England, but are a great saving of labour, and also help the storage problem, besides considerably saving the wear and washing of kitchen towels. An ideal sink is fitted with glazed tiles to resist the unavoidable splashing, but if these are not available

a thin piece of board can sometimes be fixed, a sheet of enamelled iron, or a stout piece of linoleum. A splash-preventer on the tap is also an advantage. Sometime chronic splashing from a sink tap is due to too great a pressure of water from the main, and the tap requires regulating. If there is no draining-board it is a good plan to have a small table, on castors if possible, near the sink, which can be wheeled across the kitchen and save both time and effort in transporting the crockery, etc.

Towel Fixtures.—A roller-towel is a necessity in every kitchen, and is usually provided for at an early date, but of no less necessity is the need for a definite place for the oven-cloth and tea-towels. If these are fitted with a loop of tape, and cup hooks screwed near the oven and sink, a great deal of worry will be saved. Very convenient towel-holders are also available to take three or four towels on swinging arms, and if this is fixed in a current of warm air plenty of dry towels are available in the busiest kitchen, and they are not unsightly when not in use.

The Cooking Stove.—Prior to the Great War most housewives accepted the type of cooking stove in the kitchen as a matter over which they had little control, for houses were plentiful and usually rented, but the house shortage following the war has greatly altered that outlook, for now thousands are purchasing houses through building societies who would never have thought of owning houses previously, and the stove becomes a matter of choice. Added to this, tremendous improvements have been made by the manufacturers during the last few years, and many housewives are no longer satisfied with the inefficient

stoves they possess, and see that it would be cheaper all round if they purchased a newer type of stove to replace the one in use. The old cumbersome kitchen range, which required a morning to blacklead and polish, has been replaced by a tiled exterior which seldom needs wiping down, the old rack for heating the plates (and incidentally covering them with smuts) is now covered in and fitted with a glass door, and gas and electricity are fighting for premier place as cooking mediums. Every girl, therefore, should understand something of the merits and demerits of the various stoves now on the market. It is impossible to recommend this stove or that, for each type is suitable to certain requirements, but the various types should be carefully compared when about to choose a stove. We will consider our stoves, not in order of popularity or merit, but by taking the better known and more commonly used ones first.

The Coal Range.—Of these there are several distinct types : (i) The closed range, with a large flat top, fitted into the fireplace, and a grid over for heating plates ; (ii) the same kind of stove, not fitted into a fireplace, but standing with a flue-pipe connected into a chimney, and no rack over for heating plates ; (iii) the Yorkshire stove, which has an open fire with an oven at the side, and usually no plate rack, but a space over the oven which will heat them ; (iv) the "Triplex" type of grate with two ovens, and an open fire ; (v) the "Interoven", which is convertible into a sitting-room grate at will.

Merits of a Coal Range.—

1. Such a stove is usually fitted with a boiler for

a hot-water supply for baths and other purposes from heat which would otherwise be wasted.

2. Ample accommodation for warming plates and keeping food hot.

3. The hot-water cistern will usually air all the household linen.

4. Food cooked in a fire oven has a most delicious flavour.

5. The fire warms the kitchen pleasantly in winter-time, dries and airs clothes, and helps to ventilate the kitchen.

6. Consumes all types of refuse which can be burnt, so saving fuel.

7. A large stove top will cook many pans at the same time with the one fire, and heavy pans can be pushed about, instead of having to be lifted, from one kind of heat to another.

8. Will heat irons as well as cook at the same time.

9. Adds to the cheerfulness of the kitchen.

10. Foot-pedals fitted to the door leave both hands free for attending to the oven, and there is ample room on the stove for placing food to rearrange the oven as cooking proceeds.

11. In modern stoves the flues are easily cleaned.

12. In modern types extravagant consumption of coal has been overcome to a great extent.

13. One of the cheapest methods of obtaining so many services at one time, unless gas or electricity are exceptionally cheap.

14. In a kitchen-parlour the new types are far more cosy to sit by than a gas or electric stove could be, and with an "Interoven" the range can be converted into a sitting-room grate at will.

The Demerits of a Coal Range.—

1. Involves production of much dust and labour in cleaning, unless an up-to-date pattern.
2. Great care needs to be exercised in keeping the flues free from soot.
3. Requires constant attention for refuelling.
4. Involves the carrying of coal.
5. Smoke may escape into the kitchen.
6. Soot may fall down the chimney on to food.
7. Cooking at a range is hot work.
8. Saucepans become very dirty if an open fire.
9. Irregular heating unless carefully watched.
10. The hearth constantly requires tidying up.

How to obtain the best and most economical results with a Coal Range.—

1. Thoroughly understand the working of the stove, the maker will most willingly send information or a demonstrator on request.
2. Have a modern bar-less fire if possible, for they are so economical on fuel; if not, see that the bars are near enough to prevent large cinders falling through or from the fire.
3. Utilize all cinders.
4. See that the stove has a good draught and completely burns the coal without a lot of poking.
5. Do not be continually poking the fire.
6. When the oven is not in use have an open fire; push in the dampers, and back with small coal.
7. Use small and large coal together.
8. Replenish the fire with small quantities at a time so as to prevent large volumes of smoke being converted into soot and choking the flues.

9. Have the range fixed in as good a light as possible.

10. Keep the heat uniform when cooking by mending regularly with small quantities.

11. See that you have the correct type of coal for your grate, some of the newer grates require very small coal to work properly, whilst others need lumps.

12. Have the chimney swept regularly.

13. Keep the flues absolutely free from soot.

The Gas Cooking Stove.—These stoves have become exceedingly popular as “labour savers”, but it is doubtful if they were kept as clean as they should be, if they do not involve quite as much care daily as a coal range. Probably it is, they can be neglected more successfully. They have a great advantage over the coal range, in that they can be placed where required in the kitchen, so long as the flue-pipe can still be connected to an outside wall or a chimney. Stoves can be had in various sizes varying from a handy ring for boiling a kettle to a large stove complete with boiling rings, griller, and oven. Improvements are constantly being made, and in the newer models the oven is well raised from the floor, which saves a great deal of unnecessary stooping, and does away with the necessity of a slab to stand the oven on. On the other hand, the boiling rings and griller have to be at the side instead of on top of the oven, and so it takes up a little more room than the older model. They are now made with the entire inner fittings, as well as the outside, coated with well-fired enamel, which greatly facilitates cleaning. In the newest make of stove there are no burners in the oven, they are in a chamber at the

side, and the heat passes through so the oven bottom is closed in. A heating device is now attached to many stoves which regulates the heat of the oven, and facilitates cooking. The stove should never be placed in a draughty position or there will be a considerable waste of heat and a danger of the gas being blown out.

How a Gas Burner Works.—If you examine the burner of a stove you will see that a small jet of gas comes through, and then there is a space before it goes into the pipe which leads to the ring you require to light. On that space there is either a brass screw or a piece of thin iron, which you can twist round. Remove the burner, and light the gas as it comes from the jet, and you will notice that it burns with a yellow flame. Now put the burner in and light that, and you will see that the flame is a bluish colour. As it comes rushing through the open bit of piping, it draws a certain amount of air (which the screw or piece of iron regulates) along with it, and it is the air burning which gives the bluish tinge. Try them again for heat, and you will find that the blue flame is far hotter than the yellow flame. Unless all the burners on your stove are burning with this blue flame, you are not getting the heat you should from it, and either the burners are dirty and not letting through sufficient gas for the air supply, or the air supply needs regulating. The space in the floor of the oven is there to ensure the air supply to the oven, and the tray placed there is to break up the current of air so that it shall not be too strong. In the top of the oven is an opening to the flue-pipe for the escape of heated air.

To Light a Burner.—Have the light ready to apply, turn on the gas supply, and light immediately. In lighting the oven, be sure that all the little burners are alight on both sides.

To Use the Oven.—The sides of the oven are lined with enamel, but the top of the oven is fitted with firebrick, and no cooking can be done until this casing and the firebrick have had time to get hot. Once that is done, the heat can generally be lowered considerably, and gas saved. The top of a gas oven is the hottest part, because hot air rises and also because of the heat directed downwards from the piece of firebrick. The oven is generally fitted with two or three grids, and one solid shelf. The solid shelf should go immediately under the firebrick, and is not intended for placing food on, but for browning the top of cakes, puddings, etc. ; the food should be placed on the grids. After use all enamel parts should be wiped over with a damp cloth inside and outside. If the inside of the oven is allowed to get greasy or dirty the burners become clogged, and most unpleasant odours arise when cooking is taking place. Thorough cleanliness of the burners lessens the consumption of gas by giving a stronger, clearer flame.

Advantages of a Gas Stove.—

1. The cleanliness and readiness with which the gas can be lighted and extinguished.
2. Heat can be raised or maintained at temperature desired for an indefinite period without further attention.

3. Heat need only be maintained whilst actually required for cooking.

4. Can be fitted with a plate rack for warming plates.

5. Particularly useful in the summer, as cooler to work at.

6. No smoke or soot to dirty the kitchen.

7. Chimneys do not require sweeping.

8. Saucepans keep clean outside.

9. No dust in cleaning up.

10. No fuel to carry.

Disadvantages of a Gas Stove.—

1. Not so cheerful to sit by.

2. Will not burn refuse.

3. Does not heat water at the same time.

4. Little facility for warming plates or keeping food warm.

5. No use for airing or drying clothes.

6. Does not heat irons at the same time.

How to obtain the best from a Gas Oven.—

1. See that the oven is not larger than is absolutely necessary, or a continual waste of fuel takes place.

2. Take advantage of the hot air rising from the stove when in use to warm plates or air clothes.

3. See that the burners are correctly adjusted.

4. Keep all parts scrupulously clean.

5. Cook as many things as possible whilst the oven is in use.

6. Allow the oven to get thoroughly hot before commencing, and then lower the gas.

7. Do not have the gas flaming up round the edge of saucepans.

8. Do not use a large boiling ring when a small one will do.

9. Place a sheet of iron over a boiling ring when several saucepans have to be kept boiling, and the heat will suffice for them all instead of each one having a separate jet going. Such stands can be purchased from all ironmongers.

10. The griller should be reversible, so as to be at liberty for boiling if required. When grilling or toasting, place a saucepan over to warm, and utilize any escaping heat.

11. Do not use heavy iron saucepans.

12. Do not use sooty saucepans.

13. Do not light the gas until all preparations are made.

14. Do not continually open the oven-door, or leave it open whilst attending to basting, etc., and allow the heat to escape for minutes at a time.

15. Turn off the gas directly the cooking is finished.

The Electric Oven.—Here we have the most modern of all types of oven, and each year sees new improvements, so that it is difficult to give much guidance. Unfortunately the stoves are very expensive, and the initial cost deters people from purchasing if they are unable to hire. One thing should always be remembered, the current is on quite a different rate from that of lighting, and frequently the cost of heating the oven is no dearer than by any other method. Along with this there is another advantage, the ovens are constructed without an opening for air inlet, and for this reason they can be turned off 15 to 30 minutes before the cooking is actually completed as the door is also made to prevent

any heat escaping, and this is a great saving in the bill for a year's heating, if carefully watched.

Merits of the Electric Oven.—

1. No fumes of any kind.
2. No smoke or dirt.
3. No waste heat.
4. Heat splendidly regulated; top or bottom, full, medium, or low.
5. The readiness with which the heat can be applied and extinguished.
6. Heat can be maintained for an indefinite period without further attention.
7. Ideal for summer weather.
8. No chimney to bother with, can be fixed where desired.
9. No fuel to carry.
10. Does not dirty saucepans.

Demerits of the Electric Stove.

1. The most expensive form there is for boiling on the top rings unless special, very expensive, utensils are used.
2. Not cheerful to sit by.
3. Will not burn refuse.
4. Does not heat water at the same time.
5. Little facility for warming plates or keeping food warm.
6. No use for airing or drying clothes.
7. Does not heat irons at the same time.

How to obtain the best from an Electric Oven.—

1. See that the oven is not larger than necessary.
2. Keep all parts scrupulously clean.

3. Cook as many things as possible whilst the oven is in use.
4. Watch the thermometer and see that the correct heat is maintained.
5. Turn off before cooking is finished.

The Oil Stove.—From olden times oil has been used as a heating as well as lighting medium, but usually they were simply a boiling stove and no oven was attached. They were fitted with a long, flat wick and burnt with a yellow flame. They are still on the market, and any ironmonger will show you a stove of this type. The new stoves work on the same principle as the gas-burner, they burn a mixture of air and oil, and the result is a blue flame which gives great heat. As with the gas, you will see that it is the air burning which gives the great difference in heat, and colour of the flame. If the stove burner is not kept perfectly clean, the tiny holes which admit the air become choked with dirt, and then the flame reverts to a yellow one with not nearly so much heating power. If you are using an oil stove which should have a blue flame, take care that this does not happen, and keep the wicks perfectly clean. There are several good makes of oil stove with oven attached now on the market—Valour Perfection (American make), Rippingale, Florence, Puritan (English), Primus. The ovens fitted to the oil stoves are light and portable, those with a ridged interior are rather difficult to keep clean, but most of these ovens have the great advantage of being fitted with glass in the door, and this saves opening the door to see how the cooking is progressing, and saves much heat escaping. The burners can easily be regulated, and these small

ovens will cook anything successfully after a little practice. If baking sheets must be used, as for pastry turnovers, which would fall through the grids supplied with the ovens, it will be found an advantage to have them perforated with small holes which will allow the heat to circulate freely, they must not fit to the sides of the ovens, but must rest on the grids—again to allow the heat to circulate freely. An oil stove is very useful in districts which are not supplied with electricity or gas, where fuel is scarce, or where fires are not in use for the summer months. They can be purchased in several sizes, either as a single boiling ring, or fitted with several burners and an oven.

Merits of the Oil Stove.—

1. Easily portable, can be placed wherever most convenient.
2. No trouble to remove, easily packed into a small space.
3. A very hot flame, boils quicker than gas or electricity.
4. Saucepans keep clean.
5. Economical on oil.

Demerits of an Oil Stove.—

1. Enamel cracks and the stove soon looks shabby, very difficult to re-enamel successfully.
2. Difficult to prevent slight smell from the burners.
3. Burners require a deal of attention to keep quite clean.
4. Will not burn refuse.

5. Does not heat water at the same time.
6. Does not heat irons at the same time.
7. Little facility for keeping food warm.
8. *Always* the fear that it may smoke. You may have a satisfactory oil stove for years, but one day it may smoke without any apparent cause, and in a few minutes everything is covered with a greasy, sooty pall of smuts. They will function again quite correctly when you have cleaned the mess up, but the fact remains they are *not* as reliable as a gas or electric stove.

How to obtain the best results from an Oil Stove.—

1. Each make of stove supplies a booklet describing the care of the stove in detail, and these directions must be closely followed.
2. Do not let the oil be burning when the oven is not in use.
3. Fix a small rack or other apparatus over the stove for drying towels, etc., to utilize the heat arising when the stove is in use.
4. Cook as many things as possible when the oven is in use.
5. Use light saucepans, free from soot.

The "Fireless" Cooker.—The fireless cooker or the haybox is an old contrivance which has come back into popularity nowadays as a labour- and fuel-saver. It is not possible to use them absolutely without fire of some sort, but once the contents of the pan have been brought to the boil on a fire, the rest of the cooking can be done in the "fireless" cooker, and they are very useful both for cooking meals which are adaptable to slow methods, and for keeping

food warm over long periods. Usually it takes three or four times as long to complete the cooking as if it remained over heat, and this is its chief drawback. Several kinds of fireless cookers are on the market, but the haybox which can be made at home for a few shillings is quite as satisfactory as most of them if carefully constructed. A large box is obtained, with a good lid. The sides and bottom are then padded with thick cushions of hay in thin muslin; a loose cushion is made for the top, and there should be a good supply of loose clean hay or straw to pack closely round the food containers, as unless they are closely packed round the heat will not be retained. It is also an advantage to have a loose piece of muslin to wrap round the container if hay is used loose, to prevent bits working in as the pot is packed round.

Merits of the Fireless Cooker.—

1. Can be made at home at little cost.
2. Economy on fuel.
3. Requires no attention.
4. Food cannot burn.
5. No smell of cooking, handy for bed-sitting-rooms, etc.
6. Any pan without handles can be used.

Demerits of the Fireless Cooker.—

1. Food takes a very long time to cook.
2. Stewing the only method of cooking possible.
3. Food requires re-heating before serving.

To obtain the best results from a Fireless Cooker.—

1. Must have a well-fitting lid to the pan used.
2. The pot *must* go into the box absolutely boiling.

3. Have plenty of padding.
4. Start it cooking well.
5. Allow extra time for cooking.
6. Use for purposes requiring long cooking, otherwise entailing considerable consumption of oil, gas, or electricity.

THE KITCHEN FURNITURE

The minimum of furniture should be placed in the kitchen, so as to allow as much working room as possible. When it is not the sitting-room of the house, as well as the kitchen, it is unkind to hinder the busy worker by bringing into it any unnecessary apparatus or furniture. It should be kept as free as possible, and not made the lumber room or play-room for the household.

The Clock.—The most important piece of furniture in the kitchen is surely the clock. The most important point in connection with meals is regularity. We say that people who have to wait for a meal “get past it”, and it is absolutely true. The body becomes so fatigued and tired that it does not want to start doing anything, even digesting a meal. Another point which a late meal may cause to arise, is that the people who are to eat it may have to hurry unduly over it, and this will lead to indigestion afterwards, or a feeling of heaviness and inertia. For all people the regularity of meal-times is most important, and they should be so arranged that there is approximately the same time between each meal, and not a short period, and then an unduly long wait. When several members of the family are coming in at different times

it may be somewhat difficult to arrange this, but the clever cook will find scope here to arrange meals accordingly. If the meals are prepared to time regularly, the next thing is to insist on punctuality, as far as possible, on the part of those who are to partake of them. Food is spoilt and wasted by waiting and it is most disappointing to the person who has been at great trouble to prepare an appetizing meal to see it gradually spoiling for want of thought and consideration on the part of others.

The Table.—A good steady table is an essential in every kitchen. One which will enlarge on a busy day is of great advantage, as the extra space is then available without cramping the room in the kitchen at other times. Some of the newer tables are fitted with a shelf underneath which runs from end to end, or have a wide plank serving the same purpose. Where the table must be used for meals, the latter is the more convenient. A drawer which will hold small articles such as cutlery, a tin opener, a whisk, and other things frequently required for use on the table is most useful, and is often omitted from tables which are suitable in other ways. A plain, hard wooden top will stand more wear than any other surface without spoiling, for the surface should be one which can be easily cleaned, and not readily absorbent if things are spilt on it. Soft woods can be detected by pressing into the wood with the thumb-nail, and if this method will leave a mark such a top would be unsuitable. If the top is soft wood it should be covered with an enamelled sheet of iron, linoleum, or oilcloth. The enamelled covering is expensive, but will last a lifetime and is so easily cleaned. A

good piece of inlaid linoleum cut to fit the top of the table at its usual size is better than the oilcloth in wear, and the cheapest in the end. American oilcloth is good, but it soon cracks where it falls over the edge of the table, and for at least half of its life the surface is very poor, and by the time several pieces have been paid for, it has cost more than one good piece of inlaid which would give satisfactory wear for years. As with the floor covering, avoid plain surfaces as they more readily show marks than one with a pattern. If the same covering is used for the table as the floor, the result is distinctly pleasing. When not in use, a nice washable cloth toning with the window curtains should be available. Place the table so that the worker faces the light and, if possible, easily accessible from all sides, whichever happens to be the most convenient. In a small narrow kitchen of the type so frequently built in the new houses, where the only available space is by a wall and the worker *must* stand with her back to the window and facing the wall, a great deal of extra expense is incurred by having to use artificial light on dull days and at the end of the daylight. If these can be so placed that there is room between the wall and the table for the worker, when necessary, it is a great advantage in this respect, and a consideration where the housekeeping allowance is small. Apart from the question of economy, it is always more cheerful to work in a good light than in a shadow.

See that the table is the correct height for comfortable work. A table which is too low will cause back-ache, and one which is too high, strain. The tables are made to suit an average height as a rule, but unfortunately, people vary considerably. A low

table can be fitted with stout wooden extensions which clamp on or, if a small end to the leg, they will stand in the glass feet which are sold for piano castors to stand in. Best of all, they may be fitted with castors so that the table can be easily moved from place to place without the weight on the worker. If too high, castors may be removed and domes of metal fitted in their place or have a little wood sawn from each leg. The latter sounds very simple, but unless very carefully carried out it will make the table uneven on its legs, and many a table has been spoilt by novices attempting to do it for themselves. A carpenter charges very little to do it, and is worth while engaging for the purpose. Trolley tables are quite a new invention, and some open out most ingeniously by a top shelf swinging down and a lower shelf swinging up to make a larger table when required, and take up little room when not in use. Unfortunately, they are still on the expensive side. Where space is very limited, a table mangle is extremely useful as serving a double purpose, and a very good type has just been placed on the market by Messrs. Ewbank, Ltd. The ironwork is plain and tubular, instead of an intricate fancy pattern to collect the dust, and it makes a very serviceable mangle also.

The Dresser.—In some parts of England, notably the Southern Counties, a dresser is a built-in fixture belonging to the landlord. Provided they are fitted with good doors they are very useful, but if the whole is exposed to the dust they entail a deal of work in return for the convenience they give. A good dresser should have several grooved shelves on which plates

and dishes of the dinner and tea service may be kept, with hooks for cups and small utensils, enclosed with glass doors, two or three good drawers, and below these good cupboards, the whole standing on short legs which will easily allow the broom to remove dirt from underneath without rendering the top shelves inaccessible. If pretty crockery is displayed on the shelves it will then prove a very attractive feature in the kitchen, whilst the drawers and cupboards will accommodate the kitchen towels, cookery ingredients, cleaning materials, etc.

An improved type of dresser, which is not a fixture of the house, is now sold under the name of kitchen cabinet. You can see these advertised in many furnishing catalogues, and will see that they hold all cookery ingredients very neatly, are fitted with a small table to work on, and a set of drawers or a cupboard for utensils. They are a very useful piece of furniture for any kitchen to possess, but on account of the price, must still be looked upon as a luxury by many housewives.

Cupboards.—Nothing is more trying for a housewife than to have insufficient storage accommodation. Very often the floor space is so limited that there is no room to stand cupboards, and a shelf round the room, open to all the dust is all that is provided. If the kitchen is small, make the most of it by using the walls. Good wall cupboards could be fixed in many of these cases, leaving the floor free, and when a number of hooks are required a strip of wood might be fixed below, and nails or hooks put into that. It is a bad practice to drive nails into the wall itself, as they are sure to come out and bring some of the

plaster with them. The chief drawback to this is that they are unsightly, and if the hooks can be fixed to the inside of a cupboard door, or along the edge or under a cupboard shelf, the kitchen will have a far neater appearance. If a shelf is provided, and it is not too high, it can be turned into cupboard room by standing on it a series of wooden boxes with the lids to open sideways. Margarine boxes are very suitable, and if these are well scrubbed, rubbed down with glass paper, stained and hinged with a strip of good leather strapping, they are a great improvement for most kitchens, and cost little. Where two shelves are fixed one over the other, a short curtain from the top shelf will help to keep the articles on the lower shelf free from dust, and give an attractive appearance to the kitchen if made of the same material as the curtains.

Chairs.—A chair or stool should be provided in all kitchens, of a convenient height for work at the table. Many workers are on their feet needless hours for want of such a seat, and it is not a good thing for a woman to be standing hours on end. If the kitchen is only used as such, this is really the only type of seat required, but a comfortable chair is also useful, if there is room for it, for resting in for a few minutes whilst waiting for processes to finish, or in the middle of the morning's work. Every woman who has to do all the work of a house should arrange to have 15 minutes' rest in the middle of the morning, and if she has had an early breakfast, to have at least a warm drink. *It is not a waste of time.* Fifteen minutes, with the newspaper, will give the tiring muscles time to pull up, and the newspaper keeps

her up to date in household and general affairs, and she will finish the morning fresh instead of fatigued, and in better time. By a little forethought in arranging her work, every woman should be able to do this, and we should have less jaded workers at the end of the day.

The Hearthrug.—For working hours no rugs are required, as they only collect dust and scraps, but when the day's work is done they make the kitchen much more cosy. Very often a suitable rug can be manufactured at home from scraps of cloth, and if so, make some attempt at an attractive pattern, it will cost no more and give you far more pleasure. Do not make the rugs too large or they are so heavy to shake, two smaller ones will often act just as well. If it is a large rug, place it over a line and beat it clean, instead of throwing all the weight on the worker every time. Two additional small rugs to stand on at the table and sink, if there is not a rack for the latter, will keep the feet warm in winter-time, where, as so often is the case, there are doors at either end of a narrow kitchen, and save a larger rug from being spoilt.

THE KITCHEN APPARATUS

It is better to start with little apparatus of good quality, than with a quantity of inferior articles which will not give hard and satisfactory wear. New devices are continually appearing on the market, and a housewife who is not overstocked is able to take advantage of these as they appear. Always avoid articles which are difficult to clean, or need a lot of polishing. So many utensils are now made in a

variety of materials, that a little thought exercised in the choice can make all the difference both in the appearance of the kitchen and the work entailed. The number and kind of utensils chosen must be decided somewhat both by the number of people to cater for, and the amount to be spent. First of all, let us consider the apparatus which an average housewife might hope to possess. These are arranged alphabetically in order to facilitate ease when looking to see if an article is included in the list :—

- | | |
|--|---|
| <p>B. Bowls
 Brushes—
 Pastry
 Saucepan
 Scrubbing
 Sink
 Sweeping</p> | <p>G. Graters
 Lemon
 Nutmeg
 Suet</p> |
| <p>C. Casserole
 Collander
 Corkscrew
 Cutters</p> | <p>I. Icing-set</p> |
| <p>D. Dishes
 Double Saucepan</p> | <p>J. Jelly-moulds
 Jugs</p> |
| <p>E. Egg-whisk</p> | <p>K. Kettle
 Knives</p> |
| <p>F. Fish-slice
 Flour-dredger
 Forks
 Frying-pan
 Funnel</p> | <p>L. Lemon-squeezer
 M. Measures
 Meat-hooks
 Mincing-machine
 Mops—dish and floor</p> |
| | <p>P. Pastry-board
 Pail
 Pie-dishes
 Plates
 Potato-masher
 Potato-peeler
 Preserving-pan</p> |

R. Rolling-pin

Strainers—

Sink

Gravy, etc.

S. Saucepans

T. Tins—

Scales

Baking

Scissors

Bun

Sieve

Cake

Skewers

Roasting

Spoons

Tin-opener

Steamer

Toasting-fork

Stewpot

Tray

Now let us consider lightly the materials used in the manufacture of kitchen apparatus, and we can then compare the two lists.

METALS

Aluminium.—This metal readily transmits heat, is very light in weight, will withstand rough handling, has a good surface, and does not rust. Heavy, clumsy apparatus should always be avoided, and in most cases aluminium will answer the purpose just as well as a heavier metal, which means that each time the article has to be lifted the housewife gains the benefit. Aluminium utensils are cheap, unbreakable, rustproof, wear the same throughout, and do not easily burn the food. They can easily be kept clean inside and out by the use of silver sand or sifted cinders, both of which cost little.

Tin.—Though this metal is not as light in weight as aluminium, it possesses some of its good qualities

if we had it pure. But, unfortunately, tin goods are really "tinned" goods, which are very different. The article is first made in thin iron, and then coated with a thin layer of tin. Tinned goods are apparently cheap, but directly a break occurs in the coating the iron underneath is exposed to the atmosphere, and it so readily rusts that the life of the utensils are generally shortened by it. Where the articles are used for fat and grease, as in baking tins, it is generally quite satisfactory, but for such articles as saucepans and kettles it is very unsatisfactory, and additional coppers have to be spent in having the article soldered. If these coppers were put to the initial cost instead, it would probably pay the difference towards a more lasting article.

Iron.—The great drawback of this metal is the weight. It is used in three forms, wrought iron, cast iron, and steel. Steel is expensive, cast iron is very brittle, therefore wrought iron is the one most frequently met with. It is rather slow in passing the heat through compared with other metals, and the surface must be enamelled outside and tinned or enamelled inside to prevent rusting. If properly cared for iron saucepans wear well, and if enamelled inside are easily kept clean, and will cook food splendidly without burning, but they are gradually being superseded by the lighter metals.

Copper and Brass.—This is very little used for kitchen apparatus, and where it is used, is very expensive, and always copied in the cheaper metals for people who cannot afford to pay a high price.

Enamel.—This is clean, acid proof, fairly light, easily cleaned, and unbreakable. Unfortunately, as

with the tinware, it is only a coating placed over thin sheet iron. Poor qualities very easily chip off, burn, lose the glaze, or it cracks badly with extreme heat. Chipped articles should never be used for preparing or cooking food, as particles may chip off and be highly dangerous. If a chipped article is used for water it readily rusts, and so, as with the tin, the life of the thing is often shortened by a breaking of the enamel.

Glass.—Ordinary glass is very little used for cookery utensils. A lemon squeezer and a few similar small articles are sometimes made of glass, but it cannot stand suddenly heating, is considered too brittle to be suitable, and is generally reserved for table use. Very good fireproof glass has been introduced during recent years. These dishes are very nice to use, as it is possible to see how the food is cooking, to serve temptingly straight on to the table, and so save washing up and time for dishing, but they are still very expensive.

China.—Kitchen ware should be strong, not too thin, and have a good glaze. China which is faulty for the table can sometimes be purchased very reasonably, and is suitable for kitchen use. See that dishes, pie dishes, and plates stand steadily, and do not rise in the centre, as cheap crockery frequently is faulty in this way. Although we speak of crockery as “china”, we do not really use this material at all for cooking with, it is far too delicate and expensive; the strong white articles which are so familiar are a form of earthenware.

Earthenware.—This name is frequently reserved for the heavy brown crockery used for stewpots bread crocks, casseroles, pie dishes, etc. It is very

good for food requiring slowly cooking as it does not readily pass the heat, and it is very easily cleaned. Its disadvantage is that it is brittle, and the glaze frequently cracks badly.

Wood.—Be sure to choose a really hard wood for all kitchen articles. By pressing the surface with the thumb-nail the way of the grain (or pattern) when purchasing, soft woods can easily be detected. These are much more difficult to keep a good colour, or to clean, than a hard wood.

Brushes.—Always buy the best brushes you can afford, as cheap brushes are always the dearest in the long run. Special fibres are used for each kind of brush required, which you will learn more of when studying the question in detail.

Now let us consider the two lists together :—

Bowls.—These should be of varying sizes, either enamel, aluminium, or crockery ; a large bowl for the sink must not be forgotten, but crockery or aluminium will probably be the best for cooking with. For boiled puddings, aluminium basins go a very nasty colour with the action of the water, especially in a district with hard water, and crockery basins will be found better, and save cleaning.

Brushes.—The saucepan, sink, and scrubbing brushes must all be made from fibres which will successfully resist water, and not be unduly soft. For saucepans the brushes are made of either very strong brown bass or steel wire, and sometimes bunches of metal shavings are used. The bass bristle will give the longest wear, but either form of steel more quickly removes hard particles and, at the same

time, these polish the aluminium saucepans. The sink brush must be able to penetrate the sink corners thoroughly, and with the scrubbing brush also, one end should be pointed for the same purpose. Do not buy heavy, clumsy brushes. One which is light and fits the hand easily is far more comfortable to work with. For a sweeping brush, buy the best bristle you can afford, as it will pay in the end and sweep better. For a hearth broom, buy a cheap one, as the bristles are apt to get singed when tidying the hearth.

Casserole.—This is the name given to a shallow, fireproof stewpot. It is round or oval in shape, and usually made in brown or green earthenware.

Collander.—Made in aluminium, enamel, and china. It looks like a large basin with holes in, and stands on a small pedestal. It is used for straining the water from vegetables, etc. The vegetables are poured in from the saucepan, and pressed well with the back of a saucer or similar utensil, and the surplus water is thus squeezed out. Enamel ones are the most easily washed, the aluminium seem to collect the scum on the water, and the china ones are the most expensive and break the most easily.

Dishes.—As bowls. See that they stand well and do not rock. Do not have small dishes with too deep an edge, or it is difficult to carve a joint when it is getting well cut into and thin. As long as it will hold the gravy, which will run from the joint, that is all that is required, and it will greatly assist the carver.

Double Saucepan.—This, as the name implies, is like

two saucepans, one fitting inside the other. The outer one is to hold water, and the inner one is the food container. They are invaluable for all foods, which require long, slow cooking and would otherwise easily burn, and they are very valuable also for invalid cookery. Every housewife would appreciate possessing one. Substitutes can be made by standing a jam jar in a saucepan of water, or similar devices, but the correct saucepan is a very useful utensil to have.

Egg Whisk.—There are several types to choose from, but the flat wire whisk is one of the best for wear, very efficient in use, and has nothing to get strained or out of order. Those which operate with a small wheel are very speedy, but easily get out of order, and are much more trouble to wash after use.

Fish Slice.—These are made in tin, aluminium, and enamel. Enamel ones are seldom found with a really keen edge, tin will rust easily, aluminium has a keen edge and does not rust.

Flour Dredgers.—These can be purchased in tin, aluminium, or enamel. Avoid those which have to be filled by removing a cork in the bottom. A very good substitute can be made by punching holes with a stout nail, through the lid of a cocoa-tin; it is easily filled, and can be replaced when rusty.

Forks.—Forks used for cooking require a sharp prong for lifting easily and neatly, and for this reason the steel fork is preferable, if possible. In any case, have strong forks which will not bend with weight, and one large, wire fork will be required for turning joints, etc. It can also be used for making toast.

Frying Pan.—Do not buy a light-weight frying pan, as they are unsatisfactory in wear and burn the food. As a rule, the enamel pans are not very satisfactory, they burn the food and the enamel cracks with the fierce heat. The pans vary greatly in size, and this should be borne in mind when purchasing, as it not only affects the price, but a larger pan than is necessary means a waste of fuel every time it is in use.

Funnels.—As these are always used for transferring liquids to bottles, etc., they are better in enamel, aluminium, or china than in tin. If made of tin they are apt to go rusty at the junction of the wide top with the narrow stem, and break away unless well dried every time. Even then, they are not things in everyday use, and may rust with the damp of the air.

Graters.—One grater, carefully chosen, will combine all uses. This saves storage and time when cooking.

Icing Set.—This sounds a luxury, but at such home festivals as Christmas and birthdays a decorated cake is invariably required, and has to be purchased at a far higher price than home made. They *can* be decorated without icing sugar, but children, especially, love to see the sugar decoration. Icing is quite simple to carry out if you possess an icing set, and will soon pay for itself. The ends are sold separately, for various designs, and the container may be tin or a rubber-coated calico bag. The tin pump is the cheapest, lasts the longest if properly cared for, and will usually do all that is necessary. The rubber bag is the easiest to manipulate for difficult work, but deteriorates with keeping, or by bad cleansing.

Jelly Moulds.—These are made in a variety of materials and designs. A tall moulded design always looks better than a broad, shallow one, and when it comes to turning out, a small base will fit the glass dishes more easily than a broad one.

Jugs.—These are made in china, aluminium, enamel, etc. The chief point is to see that the hand can be easily inserted for washing out, a narrow neck makes them most difficult to clean. It should also have a broad, firm base, and not be easily knocked over.

Lemon Squeezer.—Beware of the type with holes in the base. It requires a saucer or cup under to catch the juice, very often causing unnecessary washing-up.

Measures.—These, again, sound rather a luxury, but correct measurement is not a luxury but a real necessity. Usually one graded measure will answer the purpose, and very good ones are manufactured in both aluminium and enamel which will last a lifetime.

Mincing Machine.—Be sure that the knives are strong, sharp, and good. In cheap machines the knives are the inferior part, they will refuse every bit of hard meat or gristle, and be of very little use. Many good makes are available at very reasonable prices. A small mincer can also be purchased for parsley, mint, etc. Unless well dried after use they will rust, and the knives be useless.

Mops.—These are a great help whether for the floor or for washing up, but they must be kept clean and properly used. For washing up they are speedier than a dishcloth, very useful for such articles as jugs, and save the hands very considerably. For the floor,

large mops, complete with a special bucket with a device for wringing the water from them, are a very great help. They do not go into the corners as a scrubbing brush will do, but for a daily wash-over of the floor they save infinite time, banish the necessity for going down on the knees, and are really effective, provided the more searching cleaning is systematically kept up too. The whole outfit can now be purchased for under 3s., the new mop heads are to be bought at 3d. each, and will last a considerable time, or the bucket can be used with a home-made mop, if required, made from odd scraps of rag.

Pail.—Do not have too large a pail. It is heavy to lift each time that it is moved, and requires a larger quantity of water. When fires are not available, as during the summer months, this is a considerable item in itself. A small pail is just as efficient, and the water will keep hot in it as long as it is clean enough to use.

Pie Dishes.—These are made in china, enamel earthenware, aluminium. The enamel pie dishes soon lose their high glaze, easily stain, with fruit-juices, and chip easily; the strong crockery are far better, and clean very easily. They also appear to give the best flavour to the contents. Aluminium ones are good, but they do not seem to give such a delicate flavour as the crockery. Be sure that they stand well on a dish, as they are very difficult to serve from unless quite steady.

Plates.—Here, again, we have a large variety of materials to choose from. A few tin plates are useful for cooking pastry on, for nothing spoils the glaze

of china or enamel so quickly as getting it too hot in the oven. Not many plates are actually required for cooking on, they are used more for storing things in the larder, such as lard, margarine, meat, etc., and enamel ones would be less likely to get broken than china, and answer the purpose well. They are also quickly distinctive from the plates used for the table, and so frequently save time when looking for a handy utensil. Do not have the plates too large, frequently a deal of room is wasted on the shelves by plates which are too large for the purpose required, being used.

Potato Masher.—A large fork will quite well substitute a special masher, but they are so useful for serving vegetables in an appetizing manner, do the work so much more quickly and thoroughly, and are so inexpensive. that they are well worth the amount they cost. A strong wire masher will last a lifetime.

Potato Peeler.—Here, as with the masher, there is the good substitute, a sharp knife, but so many people find it extremely difficult to peel thinly, the proper peeler soon pays for its own initial outlay. They can be used for all kinds of vegetables, and are handy for slicing cucumbers, etc. See that the knife is well set, so that it really does take the skin only, and buy a good one in the beginning. They can now be purchased made of strong, stainless steel for the sum of 9d., and would last for a life time.

Preserving Pan.—Any large, strong saucepan is suitable for preserving, but it must be very thick and strong. If I burn a piece of paper on the fire, and

then burn the same sized piece of coal, you know that the coal will give very much more heat out than the paper did, and when you boil water in a pan it does not get as hot as when you boil sugar in a pan, the sugar is almost twice as hot as the water. If your pan is not a thick one it cannot stand this, and the sugar will be burnt, and the jam spoilt ; for in jam-making we boil our fruit in sugar, not in water. Enamel, brass, iron, and aluminium are all used for making preserving pans. A brass or thick iron pan both give very good results, but have drawbacks, the brass is very expensive, and both are very heavy to start with. Enamel very often burns, even when a thick pan, and aluminium is also apt to burn unless very thick and strong. Aluminium is the lightest to lift, and when several pounds of fruit and sugar are put into the pan at a time, this is a great consideration. Again, the choice of pan partly depends upon the type of stove it is to be used upon. A kitchen range, with a steady top heat for the pan to rest upon, will not be as liable to cause the sugar to burn as the concentrated heat from an oil-burner ; but remember when purchasing that the pan will last for a lifetime if properly cared for, and you may have very different stoves to use it upon during that period.

Rolling Pin.—See that the wood is hard, and do not buy a big, heavy pin. One of medium size is easier to use and manipulate. A quite good substitute is a long, narrow, round bottle of the salad-oil type, or a thick, round stick.

Saucepans.—The type of saucepan purchased will very largely depend upon the cooking range used.

We have oil, gas, electric, and coal ranges, all in frequent use to-day. Oil, gas, and electricity are all clean in use, and turned off immediately they are finished with. For these, then, a saucepan which will let the heat through rapidly will save money, a light shiny surface will not get dirty and be troublesome to keep clean, and aluminium or enamel seems to be indicated. For the fire range, however, there are other considerations. The fire may be open and the oven at the side as in a typical Yorkshire range, or closed in with a large hot-plate surface as in a London range, and the oven level with the fire. In either case the heat is not turned off continually, but is steadily maintained all day, and for these ranges it will be found that the housewife frequently resorts more to the long, slow methods of cooking as being the most successful, and prefers an iron saucepan. For an open fire the iron saucepan is undoubtedly the easiest to clean. It is very difficult to remove every trace of sticky, sooty smoke from aluminium saucepans every time they are used or from brightly coloured enamel exteriors. The black finish of the iron saucepan can be kept in a good condition much more easily—a rub with newspaper, and then brush in hot soapy water, and it looks as new again without any laborious polishing, and the little extra time that they take to cook the food is of little account when it is not to be paid for at so much per minute. For an electric stove special saucepans are really required, or it is a very extravagant method of cooking. The electric ovens are very satisfactory, but the boiling rings on the top allow a great deal of the current to be wasted unless these special saucepans are in use, and many housewives do not realize this.

Scales.—We have three types of scale to choose from—one which is suspended from a spring, another which rests upon the spring, and a third which has no spring, but is balanced by loose weights. Those which are suspended are the least satisfactory, as it is necessary to wait each time for the balance to keep still unless the ingredients are placed on very steadily ; but they can be purchased for very little, and are better than none. Those which rest upon a spring will come next in order of efficiency. They are very satisfactory, especially if fitted with a screw to adjust the pan which holds the ingredients should the spring become weaker with use ; but they generally register nothing under 2 ounces, unless expensive ones are purchased, and even these only register one ounce or over, which is frequently a great disadvantage. The third type is the one which has loose weights to counterbalance. These are usually sold with a set of weights varying from $\frac{1}{2}$ oz. up to 2 lb. or 7 lb., and other weights are not expensive to add to the set. They have two distinct disadvantages : the small weights get lost unless carefully kept in a tin, and have to be replenished, and they do not weigh large amounts as easily as the spring balance, which usually registers up to 14 lb. It will be seen, then, that for people who are frequently using small amounts under 1 oz. in weight, the loose weights would serve the purpose best ; but for a large family the spring balance would probably be the more convenient. Remember that accurate measuring is *the* foundation of all success, as much for the cook as the dressmaker.

Scissors.—A pair of cheap scissors should be kept

in every kitchen. They are required for trimming fish, cutting string, paper, etc., and such usage ruins a good pair of scissors. They also have to be washed frequently, and should be carefully dried after use.

Sieves.—These are like a round wooden drum, with a piece of wire, or woven buff-coloured stuff, stretched across the top. The buff-coloured stuff is plaited hair, and such are called “hair sieves”, whilst the others are known as “wire sieves”. Hair sieves are very expensive, but wire sieves cost very little, quite a large one costing less than a shilling. They are used for straining soups, etc. When we require the flavour only and not the large pieces of vegetable in a soup, for instance, it is rubbed through a sieve with the back of a wooden spoon. This keeps back all pips or skin from such things as tomatoes or onion, and pushes the soft parts through; and the food so treated is very much nicer and smoother to eat than it would have been otherwise. Very many things are greatly improved by sieving, and there is nothing that will quite take its place, for it not only strains the food, but breaks it up so minutely. A wire sieve would answer for most purposes; the hair sieves are generally used where the action of the wire would tend to discolour a food, which it might do when they are very acid.

Spoons.—In so many kitchens, there is never a wooden spoon to be found, yet once anybody has learnt to cook with a wooden spoon they never wish to return to a metal one! Metal spoons are necessary for measuring, scraping bowls out, etc., but a wooden spoon is far nicer for mixing, and when stirring hot mixtures they do not let the heat travel up the

handle. Wooden spoons should not be too large, or they are clumsy; the size of a tablespoon is quite large enough for most purposes, with a large one for jam-making. Care should be taken in choosing the metal spoons that they are of standard size, for frequently they are quoted as measures in recipes, and they vary very greatly.

Steamer.—There are several types of steamers to choose from. The simplest is made like a saucepan, with a lot of small holes in the bottom, and it fits on the top of an ordinary saucepan. This has been improved upon of late years, and instead of the bottom being flat it is grooved to fit two or three different sizes of saucepan, which is much more convenient. Another, and better kind, is made like a set of saucepans which stand on top of each other. The bottom one holds water, and through each of the others runs a small pipe and the steam can travel up to each of the compartments placed over it. In the best type another pipe from each compartment drains the condensed steam back to the bottom saucepan, so prevents it from boiling dry and also from water collecting in the container as the steam condenses, which makes the food wet if it is resting on the floor of the container, and not in a basin or other receptacle. A substitute can be arranged by putting the food into basins, etc., and standing in a saucepan of water, but a good steamer saves so much in the cost of cooking that it is well worth the money. They can be purchased in tin or aluminium, and, as they are used in connection with steam and water, the latter is much better in wear as it does not rust and they are now very little different in price.

Stewpot.—This is the old-fashioned type of casserole. It is taller than a casserole, but made of the same earthenware, and fitted with a lid. Food certainly cooks more quickly when it is shallow in a pot than when it is deep, and so the casseroles have partially displaced the old type of stewpot.

Strainers.—A fine strainer, and one which is somewhat coarser are required in most kitchens for straining gravy, etc. They cannot take the place of a sieve very easily, for the wire is not made strong for pushing food through, and also a strainer is most useful if it is cone-shaped. Neither can a sieve replace a strainer easily as they are too large. A strainer with large holes should be on every sink to take the refuse and prevent the sink becoming choked or the washing-up water full of pieces. As they are likely to become greasy by other things being poured down the sink whilst the strainer is on it, an enamel one will be found the easiest to keep clean.

Tins : Baking.—Flat baking sheets or tins should not fit to the sides of the oven, as it prevents the heat freely circulating; this is particularly the case in a gas or oil oven. For all kinds of ovens a sheet which is perforated with small holes will bake far more evenly. They cannot be purchased perforated but can easily be made for order. The holes must not be larger than a threepenny piece, or a soft mixture will go through before the heat of the oven has set it.

Bun Tins.—Fancy buns are very attractive to look at, but fancy tins are difficult to keep clean, and the buns frequently have a tendency to stick because all the bends were not thoroughly greased. A plain

tin is far quicker to prepare for use, much easier to keep clean, and the bun can look quite as attractive if the mixture is correct. For wet mixtures such as bun mixtures, the little paper cases will save a deal of work; they are very cheap and attractive, and have the additional advantage of being hygienic.

Cake Tins.—These should be purchased with a removable base, as they cost no more, and are far more handy.

Roasting Tins.—In the latest designs these are made with a lid over, and this not only aids in the cooking by keeping the heat in, but it also prevents the fat from spraying and spurting on to the sides of the oven.

Tin Opener.—Buy one with a steel knife and it will last. Cheap tin openers invariably buckle and become useless, so are no cheaper in the end, and they are constantly in use in most kitchens.

From the foregoing remarks you will probably by now have drawn your own conclusions that there is far more in the choice of even these simple things picked out from the list than you had thought possible. To these add your own ideas, and you will readily see why there is such a vast difference between the appearance and equipment of one kitchen and another, and since you like to spend money to the best advantage, whatever it is for, you will see how it pays to “think” before you decide which article to buy.

KITCHEN CLOTHS

Towels.—Never allow the kitchen towels to get very dirty. Some people seem to think one hand

towel, etc., ample for a week, without washing or changing it, and by the end of the week they are filthy. Remember that apart from these being insanitary in connection with food, nothing wears towels out more quickly than the hard, vigorous rubbing necessary to clean them after such treatment. They take so long to get clean that several not so dirty could have been washed in the time ; so there is no saving of time or labour, and the colour of the towel is ruined as well as the fabric. Put the towels to soak overnight, and wash them through the next morning if you have not a large supply ; the dirt will be largely soaked out, and the towels last longer and look better ; boil once a week at least with a little soda in the water.

Tea Towels.—Cheap tea towels are made of cotton, they are very poor for drying, and frequently leave things fluffy. White linen towelling, specially made for the purpose, is far more durable, quicker, more satisfactory in use, and as cheap in the end. Even a cheap linen will wear comparatively better than a cheap cotton. Government linen from old bed-covers can sometimes be purchased very cheaply. It is dark, very heavy-weight linen, and rather stiff when first in use, but it soon softens with washing, and wears excellently. All towels should be equipped with a tape for hanging when not in use, and kept in a warm current of air, so that there are always plenty of hot dry towels, without having to keep a large stock.

Roller Towels.—Russian crash or coarse linen are the best fabrics for a kitchen roller towel. Turkish towelling is more suitable for a bathroom, where it

does not get such heavy wear. When a roller towel is wearing out, if made of linen, good pieces can frequently be cut out to make tea towels, and the other portions make good dishcloths, etc.

Dusters.—No thrifty housewife should need to buy dusters. Old pieces of muslin, zephyr, flannelette, velvet, etc., all make good dusters. Cut into neat squares or oblongs, and hem round, so that they will wear longer and look neat in use.

Oven Cloths.—Nothing is more serviceable for these than Hessian (the material sacks are made of). It is easily washed, and kept a good colour, and the material is thick enough to prevent the heat coming through from the hot tins, etc., for which it will be needed. If this is not available, be sure and have a thick, loosely woven material which will wash easily. An old dress skirt will often provide a suitable piece, useless for any other purpose. Hem them round to make them last longer, and fix a good tape loop for hanging up by. Keep in a convenient place near the stove.

Dish Cloths.—It should not be necessary to buy these, as there should be sufficient household linen, worn beyond repair, to keep up the supply. Old towels, or other loosely woven cotton goods are suitable. It should be *kept* as a dish-cloth, washed after each time of using, and hung in a current of air to keep sweet. A small mop, for jugs, etc., can be made by fringing a piece of material, wrapping round and round the end of a thin stick, and binding on securely with thin string.

Floor Cloths.—Here, again, old absorbent cloths

of any description will answer the purpose, old woven cotton goods being especially good. Do not keep them screwed up in the bucket, but have a nail on which they can hang and dry when not in use.

LABOUR-SAVING DEVICES

It is impossible to keep pace with the improvements which are now appearing, to save labour in the house. Not only are implements appearing, but in numerous magazines helpful suggestions which a housewife can adopt to save time or labour by better planning, etc., are put forward. The reason for this is twofold: (i) it is more difficult to obtain domestic help, because so many other occupations are now open for girls which were not available fifty years ago; (ii) domestic work is reaching a higher status. It is now realized that it is a skilled occupation, and that the people carrying out such work well must be intelligent to do it efficiently, and as such are ready to take advantage of clever inventions which will help them.

Some of the new apparatus is limited to the use of those who can afford expensive outlay, or have electricity available, but a deal can be done without any outlay beyond brains used to the best advantage or a small outlay to purchase.

To even suggest the helps for the kitchen is a formidable list, but some of the following suggestions may be useful, and lead to other ideas, some have been already touched upon in the equipping list:—

Rustless steel fittings and equipment where possible.

Glass, polished wood, or enamel in the place of brass, silver, metal fitting, etc.

Taps with simple, untarnishable casing.

Stainless silver, or nickel, spoons and forks.

Stainless knives.

A kitchen cabinet.

A shopping indicator, and wise shopping.

Pan-lifters for hot pans, save oven cloths.

Easily cleaned cooking utensils.

Mincing machines, all kinds.

Rubber work-aprons.

Paper baking cups.

Long-handled mop and bucket for washing the floor.

CHAPTER II

METHODS OF COOKING

HEAT, for the purpose of cooking food, can be applied in many ways, each giving its own characteristic appearance and flavour with the method adopted. For instance, meat can be roasted, boiled, fried, grilled, or stewed to add variety to the menu, and this is an important point for the housewife to remember.

Roasting.—In olden days this was accomplished by hanging the meat on a “spit” or “Jack” in front of a large fire. The result was a deliciously flavoured joint, but it was very extravagant, both from the amount of shrinkage which took place with the joint itself, and because of the huge fire necessary. It has gradually been superseded by cooking meat in an oven, where it is cooked by means of hot fat round it and hot air in the oven, though we still speak of “roasting” the meat.

Grilling.—This is still carried out in front of, under, or on top of, a hot fire. Small articles such as chops, steak, kippers, bloaters, dried haddock are cooked in this-way. To grill successfully there must be a hot, clear fire, or the griller on a gas or electric oven can be used. The food is placed on (or in) a gridiron, which should be well greased to prevent the food from sticking, and the food well turned during the cooking process, care being taken not to pierce it and let the juices out. The double gridiron is far

the best, because of the ease in turning the food over. It is a short, rather fierce method of cooking, and only tender meat will give a satisfactory result, as far as meat is concerned. The food is prepared by trimming and seasoning, and then cooked on each side until a golden brown. It causes less loss in weight than any other method of cooking meat that we have.

The Dutch Oven.—This is another means of cooking directly from the heat of the fire. It is a type of grid which hangs on the bars of a fire. It has a pan to catch the fat or drips and a half-hood to reflect the heat back to the fire. The food is hung on small hooks under the hood. It is a very speedy and delicious way of cooking small pieces of fish, ham, meat, etc., and quicker than grilling, because of the reflected heat. It is seldom seen now, for kitchen ranges are being superseded by the gas oven, electric oven, etc., or bar-less grates to the cooking stove, but they are very useful where the old type of bar-grate is still existent.

Frying.—This is another quick method for small pieces of food. There are two methods—deep frying and shallow frying, the latter being the better known.

Deep Frying.—This means that there must be sufficient fat, when melted, to cover the food entirely, and a deep, strong iron or aluminium pan is generally used, two-thirds full of fat. It is an economical method of frying, for the fat can be used over and over again, as it does not take the flavour of the food fried in it, and fish, meat, or dough-nuts could follow each other successfully without being flavoured from each other if the method is properly

understood. Although more fat is required to start the pan, less is used in the long run than with shallow frying, and the food is fried more quickly, as both sides are fried at once, so less fuel is used once the fat is hot. Special pans, with a wire basket to fit loosely inside, are sold for the purpose; but an ordinary strong iron saucepan unlined, and a wire spoon to remove the food and drain it, will answer the same purpose. If the fat is at the correct temperature when the food goes into the pan very little is absorbed by the food, and it comes out crisp and dry, instead of soaked and greasy. Deep frying is the method you see in the fish-and-chip shop, only there it is carried out on a large scale.

Frying Point.—This is very important. Unless the food is put into the fat when it is at the right temperature, the colour will be spoilt or the food will be greasy or burnt. As the fat is heating, definite stages can be noticed. It will first melt, then the fat may gently bubble, later it becomes gradually silent, and finally a smoke begins to rise. It is a faint blue smoke at first, but soon turns dark and heavy, with a most unpleasant smell, which means it is burning. The correct point for putting the food in is when the faint blue smoke is first given off. Do not put too much food in at once, or it will cool the fat very much and reduce the frying point; it is better to add it gradually. Some foods require a protective coating of batter or egg and crumbs before frying; others require drying in a cloth to prevent water getting into the fat, and when such directions are given in a recipe they should be carefully carried out. If food containing water is put into

the pan it will not only cause the fat to splutter a great deal, but it may rise in the pan. Should it run over the side of the pan a serious accident might happen, and should any fat ever catch fire remove it at once from the heat and smother the flame with the nearest powder handy—flour, salt, ash, etc. Do not attempt to blow it out, you may spread it, and do not pour water over it. Never leave go of the pan until you feel it is resting steadily, and never leave it over a light. The fat should be strained each time after using, to remove particles of food, crumbs, etc. After being in use for some time, the fat changes, it becomes dark in colour and coarse in texture, and this spoils the fat for frying, and it is hastened by omitting this straining after use. It may be remedied by clarifying, if not allowed to go too far.

To Clarify Dripping.—Place the dripping in a basin; let it melt; stir in a teaspoonful of baking powder, and pour over a pint or more of hot water; stir well. As the fat cools it will rise to the top, and the dirt settles in the water or on the bottom of the cake. Remove the cake of fat, scrape it clean, and re-melt to drive out any water retained as it set.

Shallow Frying.—Deep frying is not suitable for all foods; eggs, omelettes, pancakes, etc., which are cooked in a thin layer, must have a shallow pan. Meat (unless in the form of rissoles, etc.) and large pieces of food are better cooked in the shallow pan, where each side is cooked separately, and so a longer period needed for the entire process. Choose a pan of suitable size for the family requirements, as they vary greatly and a pan too large only means a waste of fuel to heat it. A strong thick pan

is always more successful than a thin one, as the latter allows the heat to pass through too quickly, and the food is apt to burn before the cooking is completed. There should be sufficient fat to cover the bottom of the pan, and it should be quite silent, with a faint blue smoke rising from it before the food is placed in the pan, as with the deep frying. Do not place in too much food at a time, or it will reduce the temperature of the fat very much, and also there will be difficulty, probably, in turning the food over. The food is cooked on each side until a golden brown colour. If the fat splutters very much when heating, it means that liquid is present in the fat either as water or gravy. Such fat is not suitable for frying, as all that mess is unnecessary. Place your supply of fat in the oven to melt, and let it get thoroughly hot: the fat will rise to the top, and the gravy or water sink to the bottom. Take off the hard cake of fat when it sets, scrape the bottom free of salt, grit, and moisture, re-melt into a separate jar, and keep it for use when frying.

In roasting we had the direct heat from the fire to cook the food, and in frying supplied the heat by surrounding the food with fat. Many foods can be cooked by neither of these methods, but must be surrounded by a liquid of some kind—water, milk, or gravy being the most common. We will now consider the group of methods of this type, e.g. boiling, steaming, stewing, braising, pressure cookers.

Boiling.—This is a very steady method of cooking, as once the liquid reaches boiling point, the temperature in the vessel varies very little. Water

is no hotter if it is boiling violently than if it is just gently boiling ; whereas in an oven we get a great difference in the range of heat, especially in a coal range, where the fuel has to be continually added ; so this is one advantage in favour of boiling. The process is applicable to many foodstuffs.

Vegetables.—Water is used as a medium for cooking most vegetables, whether green or root, as the water softens the hard parts and renders them more digestible and palatable. For *green vegetables* the water must be kept quickly boiling, with plenty of room in the saucepan for the water to circulate ; cooked in this way the colour is brightened and they have a most appetizing appearance. For *root vegetables*, gentle boiling is more suitable, for the violent movement of the water would be liable to break them when they soften.

Fruit.—Both fresh and dried fruit can be successfully cooked by bringing gently to the boil, and maintaining at a gentle boiling point until thoroughly cooked.

Syrups.—When a syrup has too much liquid in the mixture it is boiled until the required amount of liquid has evaporated away ; fruit-juices are frequently treated in this way. After the cooked fruit has been removed, the syrup continues to boil, and as the quantity is lessened the flavour, naturally, is increased in the amount remaining. We call it “reducing” the syrup.

Sauces.—All sauces containing a starchy medium are well boiled to cook the starch and thicken them. They require well stirring during the process.

Puddings.—Many puddings are cooked by boiling all the ingredients together, e.g. blancmange, rice-mould, etc., or boiling is used to cook the starchy ingredients, and then the others are added, and the whole finished by boiling or any other method. Sometimes the ingredients are placed in a cloth or basin to keep them in shape, and this is placed in boiling water so that the heat penetrates the mixture and cooks it from without; suet mixtures are frequently chosen for this method.

Infusions.—You are all familiar with making tea. When a boiling liquid is poured on in this way we call the resulting liquor an “infusion”. Boiling liquids must be used to get a good infusion. Tea, coffee, senna-pods are infusions with which you are familiar.

Eggs.—A well-boiled egg seems to be the exception rather than the rule, although boiling is one of the easiest and quickest ways we have of cooking them. Some people cook them by placing in fast-boiling water and timing by the clock or other device. Providing the timing is correct, they may be properly cooked; but eggs vary very much in size, so the timing should surely vary also. To cook an egg properly we must consider the contents of the shell. The white of an egg is chiefly composed of a substance called albumen; the yolk contains a large amount of it also, mixed with various salts, sulphur, oil, etc. It is the white which is our chief concern. When heat is applied as you have seen from watching an egg fry, the white gradually hardens, until it changes from a liquid to a tough, leathery mass if left long enough. In the liquid state it is unpalatable,

and in the leathery state very indigestible ; what we require is the albumen just set, without hardening, whatever the size of the egg. To obtain this, place the egg into cold water ; let both come to the boil together ; boil gently for one minute, and then remove the egg. Cooked in this way the size of the egg makes no difference ; it will only be a little longer in coming to the boil if a very large one, and it is sure to be cooked through and to the right degree.

Meat.—To say that we “ boil ” meat is an incorrect term to use, as meat contains a large amount of the same albumen as found in the white of an egg. Meat only allows heat to travel through it slowly, and it takes a long time to get to the centre of a large joint. If boiled hard over a long period, the same thing will happen as with the egg albumen—the outside of the meat will go hard and leathery, and the whole aim in cooking meat should be to retain the nourishing juices as gravy in the meat. What shall we do ? If the meat is put into cold water as the egg was, the juices will run out and the flavour be spoilt, as there is no protecting shell round a joint, and albumen dissolves in cold water. We make use of two facts we have learnt : (1) That meat contains albumen as one of its juices ; (2) That albumen hardens very rapidly by heating. By plunging the joint into boiling water for three minutes we can harden the outer albumen as deep as the thickness of a sixpence, which will form a jacket to keep in all the juices of the meat ; and then the pan must be allowed to “ boil ” no more, the meat is finished by a gentle heat called simmering.

Fish.—This, like meat, is not cooked by rapid

boiling at all. Even at simmering, the fish cooks quickly and flakes as it cooks. If the water was rapidly boiling and moving, the fish would be badly broken by the movement of the water, and the shape and flavour both destroyed. If the fish has skin on, the water should be just below boiling point when the fish is put in, or the skin will break with the sudden heat. If there is no skin on (a cut piece), a little lemon-juice should be added to the water—it helps to harden the albumen on the cut surface quickly, and prevent escape of nutriment. When the fish is cooked, the skin and the bones can both be easily loosened from the fleshy part.

Simmering Point.—When a liquid is boiling bubbles rise and burst vigorously at the surface, and the whole mass is in a state of quick movement. Withdraw the heat until the bubbles just burst gently at one side of the pan ; this is called simmering point. Care must be taken that when the lid is replaced on the vessel it does not again come up to boiling point.

Steaming.—Such a simple, easy method of cooking as steaming should be a most popular one. Almost any food previously mentioned for boiling can be more successfully steamed, so that its range is very large ; also, there is very little fear of over-cooking. The great advantage of steaming over boiling is that the food does not come into actual contact with the liquid, so there is less risk of the food being broken by the movement of the water, and not so great a loss of flavour. Steamed food is lighter and more digestible than that cooked by any other method, so it is very suitable for people with weak

digestions, or for invalids. It is very economical, much fuel is saved by the use of a good type of steamer, space is saved on the stove for doing other work, the food shrinks little in the process of cooking, and the whole process requires very little attention.

There are several types of steamers. The best is the one where there is a saucepan base to contain water, over which may be placed several food containers. The steam travels up a small pipe to reach each container, and the food in one is quite separated from that in another ; so that flavours do not mingle and a whole dinner may be cooked with a small supply of fuel. Another type has a saucepan base, and over it is placed a container with a perforated bottom to it. The food is placed in the upper container, and the steam penetrates the perforations. In the best type of these the container is graduated at the bottom, so that it will fit several saucepans of different sizes. The disadvantage is that any juices escaping from the food in the container fall into the saucepan below. A pudding could be successfully cooked in the upper container, and the potatoes in the saucepan below ; but you could not possibly substitute fish for the pudding, or its juices would drop through to the potatoes ; so that this kind cannot be used for such a large range of foods as the other. A third method is carried out by standing the receptacle holding the food actually in the water in the saucepan base. The water should not come more than half-way up the sides of the receptacle, and the contents are cooked by the heat from the water it is standing in, and the steam arising from the water as it boils filling the rest of the pan. It is sometimes spoken of as a "water-jacket", or a

special container of this kind is called a double saucepan. The last method is to turn the liquid in juicy food into the steam to cook the food. Fish, for instance, can be placed between two buttered plates over gentle heat, the heat penetrates the plates, turns the juice to steam, and so makes it help to cook the fish. There is no waste of goodness, and little shrinkage.

All steamers must have a well-fitting lid, and care must be taken to keep a good supply of steam. Starchy foods should be protected with grease-proof paper to prevent them absorbing the condensed steam and becoming sodden with moisture.

A new type of steamer has come on the market during the last few years, called a *Pressure Cooker*; it has an elaborate lid, a very strong pan, and is very heavy to lift. They prevent any steam escaping, so the resulting temperature in the pot becomes very high, and as the steam cannot possibly escape it is "forced" into every particle of the food very thoroughly and quickly. They cook food remarkably quickly, and are most efficient for anything which can be cooked by boiling, steaming, or stewing, and have certainly come to stay as a new and reliable method of cooking. At present they are rather expensive, 35s. for a small size, which makes them prohibitive to a large number of housewives; but as they become more general the price will fall, and once purchased there is nothing to wear out or go wrong.

Vegetables.—These can be as successfully cooked by steaming as boiling, and the contents will have better flavour than those which are boiled, as the

water dissolves out the flavouring salts and essences, but there will be a difference in the appearance. In *green vegetables* the pretty colouring matter is a substance composed of several ingredients; these are separated out by the action of heat, and one of them, which is very powerful, will spoil the colour of the greens unless it is carried off, as it forms, by the air and water. When we boil greens we leave the lid off the pan to let it escape, and have plenty of quickly boiling water to remove it also; and in this way the green colour is preserved and, indeed, improved, from that of the raw vegetable. In steaming we must keep the lid on to retain the steam, and there is no action of moving water; the result is that the colour goes a dully yellowy green, and does not look so appetizing. Root vegetables are not affected much with regard to colour, although the colour is not quite so bright, usually, as when cooked in water, but the flavour is greatly superior to those which have been boiled.

Fruits.—These can be quite successfully cooked in a steamer, but care must be taken not to lose the juice which comes out, and that they are sufficiently well sweetened.

Puddings.—All puddings which will boil are lighter steamed. Apart from other considerations, the raising agent has not the pressure of the water against it, and the steam penetrates the food so thoroughly that very evenly cooked puddings are the result. It is a simpler method for cooking puddings than baking, as they require practically no attention. Where children are concerned, a soft outer covering is sometimes an advantage.

Meat can be successfully steamed, and small portions for invalids are more digestible if cooked by this method, the flavour is more delicate, and there is less shrinkage. Care must be taken that the natural juices are not lost, or diluted with the condensed steam ; for this reason the meat is better if in a container of some sort, two plates or a basin.

Fish.—Steaming is an ideal method for cooking fish. The absence of the moving water does away with all fear of the fish being broken. As previously explained, small pieces can be steamed in their own juices, and the flavour is far superior in every way.

Stewing.—As far as it is applicable, this is an excellent way of cooking, but it is restricted chiefly to meat and vegetables. It can be carried out by placing the food to be cooked in a receptacle in the oven or in a saucepan over a low burner. If the cooking can be done by the fire it is a *very* economical method of cooking, but if gas, oil, or electricity have to be used for several hours to cook a small amount of food, it considerably detracts from the economy of the method. The aim in stewing is to *draw out* the goodness of the food into the liquid in which it is being cooked, and serve the whole contents of the pan as one dish. Only a small amount of liquid is used, and food and liquid must be placed in a receptacle which has a very tightly fitting lid, so that no waste by evaporation takes place, or the contents will soon burn dry. The whole of the cooking is done at simmering point. As the aim in cooking is to extract, or draw out, the flavour into the liquid surrounding, and turn it into a well-flavoured gravy or juice, we always cut the food up into small pieces,

so that the liquid can reach all parts easily, and to increase the food surface exposed to the liquid. The amount of liquid is restricted to ensure a good thick gravy, for a thin, watery one would be most unappetizing.

Meat.—The economy here lies in the fact that tough, gristly meat can be cooked successfully by this method, and such pieces of meat are always cheap to purchase. Long, slow cooking loosens the fibres which compose the meat, and the liquid is able to soften the gristle, which is mixed in with them. No juices of any kind escape, they simply become part of the gravy, so no goodness is lost. Sometimes a little vinegar or a sauce containing vinegar is added as an ingredient of the stew; the vinegar helps in the work of softening the meat fibres. Vegetables and suet dumplings can also be added, and in this way almost the entire dinner can be cooked using only one utensil instead of several. Starchy vegetables do not stew very well, they break up and lose their shape, but an Irish Stew, which contains a large quantity of potatoes, provided it is carefully watched to prevent this breaking, can turn out a deliciously flavoured and appetizing looking dish. An old country saying should be memorized for cooking meat stews; it runs, "A stew boiled is a stew spoiled."

Bones.—Long, slow stewing of well-broken bones will draw out valuable salts, jelly, marrow, etc., for making soups and gravy. It is easily carried out by placing the container in the oven, whilst other cooking is in progress, and it is not so important if it reaches boiling point. Leave the bones until they are white and clear of the small pieces of food;

they may even turn quite soft if stewed long enough. Strain the liquor off, and when cold any fat will rise as a cake to the top and underneath is the valuable liquid ready to use. If not wanted immediately it will keep quite well if boiled up occasionally. We call this liquid "stock", and you will frequently see it referred to in meat, fish, gravy, and sauce recipes. Fish stock can be made in the same way.

Vegetables.—Stewed vegetables usually form part of another dish, as otherwise they would simply be boiled.

Fruit.—We speak freely of "stewed fruit", but generally by the time a soft fruit such as raspberries or currants reach the point of simmering they are already cooked through and ready for serving. However, a few harder fruits such as apples and pears do require a little further cooking, and this must be carried out at no higher temperature than stewing or simmering point, or the fruit will be broken, so the term is correct. All kinds of fruit can be cooked in this way. To prevent soft fruits breaking as they cook, the wisest plan is to make a syrup of the sugar and water which will be required ($\frac{1}{4}$ lb. of sugar and $\frac{1}{4}$ pint of water to each 1 lb. of fruit); let it reach boiling point, then place the fruit in this and allow to simmer for a few minutes.

Earthenware and Glass Containers for Stewing.—Casseroles, "Pyrex" dishes, or thick earthenware stew pots are excellent for stewing in the oven, for they are thick and made of material which will not let the heat pass through too rapidly, so help the slow cooking which is so essential, and are not likely to burn easily. The "Pyrex" dishes are very much

more expensive than any of the earthenware, some of which are very cheap. These containers are all easily kept clean, do not flavour the food or retain the flavour for other dishes cooked in them, and can be served directly on to the table, which means the food is sure to be hot and saves washing up.

Haybox Cookery.—This is another form of cooking by stewing, but full details are already given under “Kitchen Apparatus”.

Braising.—This method of cooking is used more on the Continent than in England. It is a combination of roasting and stewing methods. Vegetables cut in large pieces, a few pieces of ham, bacon, and the meat to be braised are put into an iron pan and slightly fried to develop the flavours. Sufficient liquid is then added to come half-way up the vegetables (stock preferred). The meat to be braised is placed on this bed of vegetables, a well-fitting lid placed on the container, and then cooked in a moderate oven until the meat is tender. The meat is thus partly roasted and partly stewed. The meat is finally finished off by removing the lid and browning the contents of the pan by grilling. Cheap, coarse, fibred meat can be very successfully cooked in this way. When cooked the gravy is poured off, strained, browned, thickened, and served with the meat. The vegetables are not served as such.

Baking.—Having discussed cooking by means of fat, water, and steam to give the heat, there still remains baking, where nothing is used except the heated air of the oven surrounding the food. You are all familiar with an oven of some type. Hot air in the oven quickly evaporates any moisture which

is in the food, so it is not suitable for food requiring moisture to cook it successfully, e.g. stewing steak. The oven should be well ventilated, and kept scrupulously clean. A dirty oven smells when heated, flavours food, and gives out greasy smoke each time the door is opened. If, by any chance, you have to use such an oven (e.g. removing to a new house), the best stuff for cleaning it, if it has an enamel lining, can be bought from any gas company. They stock a cleaning agent called "Kleenoff": it is smeared on the oven with a rag overnight, and washed off with hot water the next day. It is very easy to use, is not expensive, and is very effective. Once your oven is clean, keep it so by washing out regularly. If it is a fire oven scrub with hot soda-water and then limewash it out. With our previous methods of cooking the temperature is kept fairly level by the use of the fat or water surrounding the food, but with an oven, particularly if heated with coal, a very great variation in heat is possible. This is frequently an advantage but unless you understand how to tell the heat of the oven much food may be wasted and spoilt either by having the oven too cool and food being too long cooking, or by being burnt before cooked because it was too hot. If there is not a thermometer on the oven it is a very simple matter to test the heat. Sprinkle a little flour on a tin, and place it in the oven in the part you wish to cook in, and leave it for five minutes. If pale yellow, the oven is cool, suitable for biscuits, etc.; if golden brown, medium heat and ready for most puddings and cakes; if burnt, a very hot oven, and not suitable for many purposes. All kinds of ovens can be tested in this way, and flour is generally handy when cooking

is in progress. To maintain a fire oven at a steady heat the fire must be kept up by adding small quantities of fuel at short intervals, for each time coal is added the heat drops until it is burning properly. Another good reason for this is that if much coal is added at a time, a lot of smoke is given off, and this would otherwise supply flames and heat instead of being wasted up the chimney and clogging the flues. An oven heated by a fire always seems to give the sweetest flavour to food, but those heated by oil, gas, or electricity are far easier to keep at a regular temperature ; in fact, many of them are now fitted with a special device which will maintain an even temperature for an indefinite period, called a regulator. If the fire oven gets too warm during cooking, the food can be protected from burning on the top by covering it with clean, greased paper, white or brown. Underneath it can be protected by standing on another tin, or in a tin filled with boiling water, or in a tin filled with hot sand, earth, or salt.

Vegetables.—These are not very successfully baked, as they need the water to soften their structure. Just a few which contain a great deal of water can be baked, e.g. the potato and onion, but it is not used on a large scale.

Fruits.—As we have already seen, fruits can be stewed very successfully in an oven, and as with vegetables, those which contain plenty of juice bake very successfully, e.g. apples.

Puddings.—Any pudding requiring a crisp, brown exterior will bake successfully in an oven. Baking and steaming are the two chief ways of cooking these articles of food.

Cakes.—All cakes, requiring as they do a firm, dry, brown exterior, are cooked in the oven. It is the best way of cooking starchy foods, for with moisture they are apt to become sodden very easily. For both puddings and cakes a nice hot oven is required, and the directions given in the recipe for baking should always be carefully followed. If no directions are given, a hot oven is usually indicated.

Meat.—When meat is cooked in the oven protection has to be given to prevent the hot air drying the meat too rapidly, and also to keep in the juices on the cut surface. To carry out both purposes, the meat is basted with hot fat. Fat is put in the oven in a baking tin, and when hot and silent, the meat, trimmed, wiped, weighed, and salted, is placed on a rack in the tin, and the hot fat poured over it with a spoon. This hot fat acts in the same way on the albumen as the hot water used in boiling, it hardens an outer coat. The meat is then given three minutes in the hottest part of the oven to get this coating as thick as a sixpence and keep all the juices in. At the end of that time this should be accomplished, and then the heat must be moderated, or the outside will be over-cooked before the heat reaches the centre. Every quarter of an hour the meat must be re-basted with the hot fat, for very great shrinkage takes place as the meat is baked, and the coating may crack and let the juices out, and also it is necessary to prevent the meat drying by evaporation. Meat cooked in this way is very appetizing, and the best for colour.

Fish is cooked in a similar manner to meat, for here, again, care must be taken against the

evaporation of the natural juices, so fat or water are usually required. The method of steaming between two plates, previously mentioned, can be carried out successfully by the heat of the oven. When fish is baked it is usually in a large piece or stuffed. It will thus be seen that baking, like boiling, is applicable to a large range of foodstuffs, and a very useful method of cooking.

UNCOOKED FOODS

Much space and attention has been devoted to the methods of cooking food, but the wise housewife must never forget that there is also a large range of foods which require no cooking, and of great advantage to her household.

Cooking has many good points, but it also has some bad ones. Sometimes cooking actually hardens food and makes it more difficult to digest ; again, valuable juices run out, or are drawn out by heat and hot water, and the very valuable ingredients of foods known as "vitamins" are frequently destroyed altogether. To obviate this uncooked foods should be freely used where they are suitable. Salads of fresh green-stuff, vegetables, and fruits should be eaten liberally. Tomatoes, cress, lettuce, watercress, radishes, onions, fresh carrot are all cheaper than jam, if nothing more elaborate can be purchased, and should frequently find a place on the menu when they are in season.

MARKETING

Good marketing is as important as good cooking, for no successful cooking can be done if poor or unsuitable ingredients are provided.

First of all the housewife should do her own shopping as far as possible, and take care in choosing the shops she will deal at. In a new district always try the various shops and compare them for cleanliness, speedy service, or otherwise, good quick turnover of goods, and willingness to deliver heavy parcels. A quick turnover does not necessarily mean a large shop, but it does mean that the goods purchased are fresh. A clean shop and shopkeeper means somebody is particular with regard to cleanliness, and we cannot be too particular about our food supply before it reaches our home. Prices vary greatly at the shops, and the best value for her money should be sought by every housewife, whether her circumstances permit of luxuries or not. It is a good plan to obtain price lists where possible, and compare the various prices.

Having found the best shops to deal at, it is wise to keep to them, as the shopkeeper learns the particular type of article that appeals, and will try to study the customer to keep their patronage, but always see that prices keep to the average. Once the housewife is well known, orders can be sent when it is more convenient, but as a general rule it is better to do shopping personally, for it often suggests variety and you see the foods in season.

Make an order out before shopping to avoid unnecessary trips, and think of the food suitable to the season and prevailing weather. A slate or indicator kept in the kitchen is very useful as a reminder, if things are put down as they are used up. Pay cash, or at most a weekly bill; the shop is bound to charge more if they have to wait for the money or to run the risk of bad debts. Beware of "gift

coupon" goods, and those extensively advertised. The article may be of good quality, but the fact remains that the purchaser has to pay for all that advertising, and also for the gift.

The importance of variety in the diet must always be remembered, and if you can shop in the morning you generally have better variety offered than later in the day ; but a person who has to do all the housework as well as cook will find this impossible ; she is bound to do her shopping on the previous day to get everything worked into the time at her disposal.

When ordering the goods there are several points to consider, besides the actual goods required. Go through the larder, and see if any food can be utilized to save purchasing ; we must consider how many we are purchasing for, whether the goods will keep well if we buy more than the actual requirements, how much room we can spare for storing, how much money can be spared for that kind of article just then, whether it would be an advantage to buy a large quantity.

Some things are cheaper to buy in a large quantity, as there is not the paper and wrapping to pay for each time ; others are better with keeping, but this does not apply to everything.

Groceries.—Never buy these in very small quantities. The practice of buying tea and other things in one or two ounce packets so often adopted by poorer people is just making things worse, for they are far dearer bought in this way. Only things having a strong taste or smell, such as spices, essences, freshly ground coffee should be bought in small quantities, as they are liable to spoil with keeping

or should be used fresh. To test good coffee, place a little in the palm of the hand and press firmly. Pure coffee falls apart when the hand is opened ; if it cakes or forms a ball some adulterating substance has been added.

The following list is suggestive for articles which require a little judgment in selecting ; they are arranged alphabetically for convenience :—

Bacon.—The rind should be thin and pliable. Lean bacon does not waste as much in cooking as fat. Shoulder is one of the most economical cuts.

Baking-powder.—Buy in small quantities, and store in an airtight tin. It is much more reliable and far cheaper if made at home, and no trouble to make. Take $\frac{1}{2}$ lb. fine-ground rice, $\frac{1}{4}$ lb. bi-carbonate soda, and 2 oz. tartaric acid ; crush out any lumps, mix well by putting all through a sieve or strainer several times. Keep in airtight tins and use two teaspoonsful to every pound of plain flour. Cost, $7\frac{1}{2}d.$ for 14 oz. Bought, 1s. $3d.$ for 16 oz.

Biscuits.—Buy in small quantities and store in airtight tins.

Butter.—Should not contain a deal of water. When tiny spots of moisture can be seen on a freshly cut surface, a deal of water has been worked into it to add to the weight. It should have a fresh, pleasant smell, and the colour should be uniform.

Candles.—Not many are used now, but they burn longer when required if well dried by storing.

Cereals, rice, sago, etc.—Do not keep in open jars to collect the dust ; buy fat, round grain rice for puddings, it is cheaper and more suited for

that purpose. The more expensive long grain rice is intended for boiling only.

Cheese.—One of the things you are allowed to ask to taste. Price is more according to flavour than nutriment ; buy as required.

Cocoa.—Can be bought much cheaper loose or in paper packets than in gift coupon tins.

Dried fruits vary greatly in price and quality. Currants, for instance, get the highest prices when they are small, dark in colour, and have a blue bloom on them as those supplied from Greece ; but currants which are larger and red in colour, as supplied by Australia, are just as sweet, and much cheaper. Many people do not take sufficient advantage of the large range of dried fruits available, and buy only currants, sultanas, etc. Dried fruits are much cheaper than fresh where money has to be considered ; prunes, dates, figs, apples, pears, apricots, peaches are all delicious if well washed to remove the dirt and soaked well before use. Remember they are a long time in drying, and the moisture cannot be replaced in a few hours. Soak for one, or even two, days if possible and use the water from the soaking to cook them in, so only add sufficient for that purpose. They are at their best in the autumn and early winter, just when other fruits are scarce and dear.

Eggs.—Great advantage should be taken, wherever possible, of buying eggs to store. They are most plentiful, and therefore at the cheapest, during the latter end of March or early in April. They are easily preserved in several ways. The shell of an egg is porous when fresh, and will allow air and bacteria

to pass through to the contents. These little pores must be sealed to preserve the egg successfully, and it is not difficult to do so by means of water-glass, wax, oils, etc., which fill the pores and so block up the air passage.

To Preserve by Water-glass, the eggs are placed in buckets or other large containers which are water-tight, and the whole of the contents covered with a solution of water-glass dissolved in water. A pound of water-glass will cost 4d., make one gallon of the solution, and be sufficient in quantity to cover about 100 well-packed eggs. A cloth should be placed over the container to keep it free from dust and prevent rapid evaporation. The method is simple, speedy, and satisfactory, provided the eggs are quite new-laid when so treated; the drawback is to find the necessary large receptacle which is watertight, the room required for storing safely, and the fear of evaporation of the liquid.

To Preserve by Wax.—Several waxy preparations are on the market; one of the most satisfactory is "Condio", manufactured by Aston & Stevens, Bath. The egg shell is well rubbed with the mixture, and they can then be stored in perforated boxes (strong cardboard will do) anywhere that is cool and draughty. The country people sometimes use lard with the same end in view, or lard and white wax melted together. It is useful because it does not hold up useful household articles for storing, and they need not be on a flat surface for fear of spilling the liquid. From my own experience eggs done by this method are more satisfactory than those using water-glass, and in better condition when required.

The "Condio" keeps well after opening the bottle, and can be used for at least three consecutive years. A bottle costing 2s. 3d. will do 600-700 eggs, so the cost is about the same eventually. The chief drawback is that eggs so prepared take rather longer to do.

To Preserve by Oils.—A few methods are now available by this means, and of these "Oteg", manufactured by Sozol (1924), Ltd., London, is a good example. It is quicker than rubbing the eggs by hand, as a special holder quickly dips the eggs in the mixture, coating it evenly in a second. It, again, has the advantage of less difficulty about storing, but is rather more expensive than "Condio", as 250 eggs will use a 2s. 8d. tin. It will keep for several months after opening the tin.

Flour.—See notes on flour in the Dietetic section for processes employed in milling. Plain flour, to which baking-powder is added for cakes, etc., is much cheaper to use than self-raising flour. Plain flour, at present, is 1s. 4d.—1s. 10d. per stone; "self-" raising is 2s. 6d.—a big difference.

Jam.—Home-made is always superior in flavour to bought jam, and is much cheaper per pound. It is not always possible, however, to make sufficient for the family requirements, and some must be purchased ready made. Jams are now marked according to quality either on the large label stating the contents, or on a small separate label at the other side of the jar, as higher- or lower-grade jam. This is a great help to the housewife. The lower grade are good jams, but the fruit is possibly broken in appearance, whilst in the higher grade great care is taken in this, and other respects, but the economical

housewife would buy lower grade for cooking purposes, and the higher for table use, and so save considerably.

Milk.—This is so important that long notes will be found in the Dietetic section, but a very simple test may be mentioned here for the quality and cleanliness. Place a glassful of the milk to be tested and leave in a cool place for 24 hours; the cream will rise to the top and the dirt will sink to the bottom; lift carefully and look for both. If several samples are tested together surprising variations will be found.

Nutmegs.—Should be dark in colour; the cheap ones are light in colour. They are the wild ones, and not so good a flavour, so more is required when used.

Sugar.—No advantage now to buy in large quantities.

Soap.—Always contains a deal of water when fresh, and this makes it dissolve quickly in use. Keep at least one or two pounds in stock, cut up so that the air can get to each side of it, and as one pound is used, buy another to replace it. In this way, without much outlay, the soap is always well dried.

Soda.—Spoils by contact with the air; keep in a tin with a lid on, and buy only as required.

Tea.—Cheap tea appears to be a larger-looking packet for the money as well as cheaper in price, because the leaves do not pack so well together, but it takes more to make a good brewing, and a good tea is usually no more expensive in the long run, whilst the flavour is very superior to the cheap teas. The leaves should be well twisted, and not too short; drop

a pinch in a clear fire, the bluer the blaze the better the tea. The water in different districts requires different blendings. When moving to a new district try several blends, until you find one that you like ; keep in an airtight tin, and never buy in small packets, as they are very extravagant.

Tinned Foods.—Do not keep a large stock, although one or two are handy to have in the house ; but the fresher they are the better. Store in a cool place. All tinned goods are now graded under “ first ”, “ standard ”, and “ second ” quality ; with fruit it can also be purchased without sugar in the syrup, with a light syrup, or with a heavy ready to use. First quality contents are guaranteed the finest of fruit and syrup ; standard quality are good reliable material, but not quite as large and fine as the “ first ”, whilst seconds are small fruits, etc., not uniform in size, unequal in colour and ripeness, and frequently a thin syrup if fruit. See that you purchase according to the price you give, for all are wholesome and the cheaper brands could sometimes be used to substitute the finer grading. Taste the thinner syrup in fruits to see if sweet enough to serve at the table. If not add a little to the contents of the tin, rather than have everybody at the table adding a spoonful.

Fruit and Vegetables.—

If these cannot be home-grown, it is much better to choose personally. The greengrocer is naturally anxious to avoid waste on such perishable goods, and it is only natural to dispose of those in stock before selling fresh, if possible. The personal shopper is more likely to obtain the fresh goods than the one sending a small child or an order.

Fruit.—This should be fresh, ripe, and perfectly sound. Take advantage of the cheap seasons in the fruit to make jam.

Green Vegetables.—Should have crisp, firm leaves. Avoid those which have had most of the outside leaves broken off, they showed signs of staleness and so were removed; such things as “shingled” cauliflowers should always be regarded with suspicion. Medium-sized vegetables are always the best for flavour; large cabbages, etc., are liable to take a great deal of cooking to soften.

Pod Vegetables.—The pods should be crisp and bright green in colour; yellow pods are stale or overgrown vegetables.

Root Vegetables.—Buy of medium size and a good shape. They should be crisp, firm, and unwrinkled, with no top growth. Buy onions in small quantities, or they may sprout in the warm kitchen atmosphere and be wasted. Celery should have a firm, white heart, free from brown specks. Cucumbers and marrows should be crisp and a good shape, and the skin shiny.

Animal Foods.—These are the most important foodstuffs that a housewife has to deal with, for they not only do very important work in the body, but they are the most expensive to purchase. We have two large classes, meat and fish. The meat we divide again into white and red meat, the names being given from the colour of the flesh when cooked. Under “white” meat we have a large variety of birds, rabbits, hares, veal, and under “red” meat beef, mutton, pork. Be most particular in your choice of the butcher’s shop. One which is open for all the

dirt of the street to blow into and is served by a man in a dirty smock cannot compare for cleanliness with one which is protected by a good glass window. Everything in the shop should be well scrubbed and clean, and there should not be any smell of tainted bones or meat. When choosing your meat consider first of all the method by which you intend to cook it, for you have seen that many advantages are gained by understanding the joints suitable to your method. Avoid a joint which contains a large, heavy amount of bone or an excessive amount of fat, both can be bought cheaper than on a joint, but at the same time avoid unusually lean meat, as it is dry when cooked, and has not the flavour. The method in which meat is cut up varies greatly in different parts of the country, but the most tender joints are always those which are cut from the parts least used by the animal, and therefore the least muscular, e.g. pieces cut from the centre of the back will always contain less gristle than the neck or legs. In beef, sirloin, round, and rump are universal good joints, whilst shin beef, brisket, and skirt are known for muscular portions, but many other joints are cut to local requirements, and vary greatly in name. When you see a piece of meat you like, ask the butcher if it is suitable for cooking as you intend, and the name of the joint. In this way you will quickly come to know the various cuts for your district, and it is far better than looking at a diagram and trying to get it from that.

To Choose Meat.—See that the flesh is firm and dry, free from smell, and a good colour for its kind. Rolled meat quickly goes tainted, because of the lack

of air round the rolled part ; no meat should have the faintest suspicion of smell. The fat should be firm, well set, and free from any marking or veins, and a good colour for its kind. Internal meats should be *very* fresh and used at once. The most popular meats are beef, pork, mutton, veal, and lamb, and in the order given. Where money has to be considered do not buy small quantities of meat such as odd chops, $\frac{1}{2}$ lb. of liver, $\frac{1}{2}$ lb. of steak for dinner day after day. The same money would purchase a small, economical joint which would go further. Whether the meat is fresh or chilled, it should have a well-marbled appearance of fat intermingled with the lean. If the meat has been ordered and delivered a weight ticket should be sent with the joint stating weight and price, and these should be checked occasionally to see that they are correct. Notices are frequently exhibited in the shops now requesting people not to touch the meat with their hands, and further tickets will indicate the quality of the meat for sale, which are all to the good of the housewife. Cheaper meat is of inferior quality and flavour to the best. The finest beef is from an ox or heifer, but cow beef is also sold in many shops, and has not the same flavour, though cheaper in price.

Foreign Meat should not be spoken of as " frozen " meat. The best qualities are not frozen now, they are only chilled to bring them to a temperature sufficiently low for safely transporting. Good quality chilled meat is quite equal to any other, though the flavour is rather spoilt by the chilling, but it is better to buy a prime joint of chilled meat than one of inferior English. Chilled meat is very clearly

labelled to indicate its quality. The best supplies are sent from New Zealand and can be well relied upon, and the same applies to Canterbury and Australian lamb. The pasture in these countries is good and plentiful, and the animals can be cheaply reared, and now that they can be killed and dressed over there and sent here packed into a small space, this large extra supply of meat is available. Before cooking the meat it must be allowed to thaw thoroughly. Hang in a current of warm air in the kitchen *for at least two or three days*, place something to catch any juice which drips out, and so prevent a mess. The outside will go dark and dry in appearance, so that it does not look nearly so appetizing, but you will find it will very greatly improve the flavour and appearance of the meat when cooked. Cover it with a piece of muslin to protect it from the dust.

Now for the individual animals and how to choose their meats :—

Beef.—The lean is a bright red colour when freshly cut, the fat is creamy, yellow, hard, and dry. Bright yellow fat means that the animal has been fed on oil cake instead of grazing in a field, and the flavour is very inferior. Hard gristle in the meat indicates an old animal when killed. It is seasonable all the year round, but at the prime in the autumn.

Veal is the flesh of the calf, and is much lighter in colour than beef, almost a pink. There should be plenty of firm white fat.

Mutton.—Small-boned, plump joints are the best. The meat is a much deeper red than beef, but the

fat is harder and whiter. In season all the year round.

Lamb.—In season from March to September, and cheapest May to July. The flesh is rather lighter in colour than mutton, and the fat is pearly white.

Pork.—Bad pork is dangerous to eat, so more care must be taken in choosing than with other meat. The flesh should be a brownish pink, and the fat very white and firm, with no spots or kernels. Small pork is the best, and the rind should be smooth and thin. It is in season all the year round, but goes bad very readily in hot weather, which has given rise to the saying, "Never buy pork when there is not an 'r' in the month."

Salted Meat.—Meat is sometimes placed in a solution of brine by the butcher to give a fresh flavour to the meat. Both beef and pork are so treated, and are spoken of as "salt beef" and "pickled" pork; salting forces the good juices out of the meat, however, and it is not as nutritious as the fresh meat, or as easily digested.

Internal Organs, etc., which are eaten as food are termed edible offal, and properly cooked they add many dainties to our menu.

The Ox.—

1. Ox-cheek, suitable for stews.
2. The head can be made into brawn or stews.
3. The tongue, boiled, pressed, and served cold, is one of our greatest delicacies.
4. Ox-heart is rather inclined to be tough, but the heart of a calf, stuffed and roasted, is very palatable and economical.

5. The liver requires careful cooking, and is then cheap and nutritious.

6. Kidneys, used chiefly as a flavouring for stews, etc.

7. Sweetbreads, only suitable from the calf.

8. Tripe, very tender, nutritious, and easily digested. There are various names for different kinds, and they are taken from its appearance.

9. Ox-tail is stewed or used for soup-making, they are rather expensive.

10. Cow-heels, for stiffening all kinds of brawns ; they are stewed with other meats. For making calve's-foot jelly they are stewed separately for many hours, and the result is used for invalids.

The Sheep or Lamb.—

1. The head, used for broth, brawn, etc.

2. The brains, considered a great delicacy, usually sold with the head.

3. Tongue, boiled and served cold, makes a good substitute for ox-tongue, which is more expensive.

4. Heart, stuffed and roasted, makes a cheap and satisfying meal, but is rather difficult to digest.

5. Liver superior to calf liver, and fries well.

6. Kidneys a great delicacy, and sold separately, not by the pound.

7. Sweetbread. The lamb's sweetbread is the greater delicacy of the two, but they are expensive, and often reserved for invalids.

Pork.—

1. The head can be gently boiled for brawn, and is very tasty, but sometimes they are very fat.

2. Tongue, as with the sheep.

3. Kidneys are sold frequently with the loin of pork, but sometimes separately as with the sheep.

4. Feet.—The trotters are stewed for brawn as with cow's-heel.

Birds.—These are stripped of their feathers, the digestive organs removed, and then cooked in the manner required. They are generally sold by the fishmonger, but it is not within the scope of this book to give details of choice. As with other foods, a medium-sized bird is always the best for flavour.

Fish.—As with meat, great care must be exercised when choosing, and as we are not restricted to only three or four chief fish as we are with the animals, it is more difficult to know how to shop wisely. Again choose the shop carefully, see that there is a quick turnover, or the fish will be stale, and probably has been kept on ice for a long period to keep it fresh, and this spoils the flavour, though it is very hard to detect when buying. Ask the price of fish regularly, as it varies according to the season of the year and the weather. Ask the names of the fish, so that you find out those you care for best, and do not be frightened of trying new fish. See that you get the fish you ask for. Any *good* fishmonger will tell you how to tell the real fish, for where cheap fish is offered for sale it is frequently not the fish it is supposed to be at all, so it cannot possibly have the flavour of the genuine article. For example, dried haddocks vary greatly in price ; a real haddock has a "thumb-mark" at either side of the head, just under the gills, whether fresh or dried. If you turn the cheap one over you will probably find no "thumb-mark"—it is small cod treated in the same

way, but in no way equal in flavour. Ling is sold for cod, and many other substitutes are practised on the unsuspecting public. (Legend says that it was a small haddock which Christ picked from the boat to give the tribute money, and that it has borne the imprint of the fingers ever since.)

The middle portion of a fish is always dearer than the head or tail end, the reason being that it is better in appearance when cooked, though no different in flavour. The cheapest fish are cod, ling, whiting, rock-salmon, conger-eels, hake, and the reason may not be inferior flavour every time to those which are more expensive, but merely a coarser graining of the flesh, or a more abundant supply.

Personal choice is very essential with fish, for the prices vary so considerably even daily. If ordered it should be delivered with the weight and price on the ticket, as with meat.

General Choice.—

1. Choose medium-sized fish, and those that are in season.
2. The flesh should be firm, dry, and stiff.
3. A bluish green tinge to the flesh denotes a stale fish.
4. Examine the head of the fish well, the eyes should be bright and prominent, the gills (like ears) should be a bright red, except with a herring.
5. The skin should be bright and shiny, with plenty of scales if that type, which easily rub off.
6. Not the slightest unpleasant smell.
7. Flat fish should be examined on both sides, for it is the dark skin which most easily shows signs of staleness.

8. Beware of a display of fish which have all had the heads chopped off, they are all stale.

Dried Fish are not as easily digested as fresh fish, and should not be given to little children or to invalids.

Shell Fish.—These require to be very fresh and bought at reliable shops, or they may be dangerous to eat. Crabs need a special portion removing, and so do some of the other shell fish, and unless you know how to do this ask the fishmonger to show you, and then prepare according to the directions in a good cookery book. As a general rule food salesmen are very willing to help their customers, as in the end it improves their trade. Do not ask, of course, just when he is very busy, but choose a quiet time and you will not be refused.

STORING

Having bought the food wisely, we must not waste it by careless storage. In so many houses this is the great problem, where to keep things. As a general principle keep food as cool and airy as possible, free from damp, dust, and dirt. If the larder gets the fierce sun on a summer's day, try to find alternative accommodation. Sometimes a large box can be fitted on a window-sill as a safe, where it is cool and shady; see that it is not near a drain or lavatory, and do not stand the dustbin under it. Take a piece out of the door and fix a piece of perforated zinc, cover the top with stout lino to make it water-tight; screw on to the window-frame, and give the whole a coat of paint. In the larder do what you can to keep it cool. If there is a window fit a small dark

blind over or colour with green-wash to prevent the sun penetrating, keep a watering-can full of water handy, and each time you conveniently can do so, sprinkle the floor. If the window will open have a good through-draught night and morning when the air is cool, and keep it carefully shut during the heat of the day. When the window is open a piece of muslin curtain over will allow the air to pass through, but keep back the dust. Arrange it so that on a still, airless day you can draw it right back, but also so that it will be firmly drawn across on a windy one. Perforated zinc is also good, and can be fitted into a frame, to slip in and out ; quite a large sheet costs only a shilling, but very often it is not kept as clean as a curtain.

Keep the larder clean and free from flies ; do not sweep it out, but use a damp cloth to wipe the shelves and wash the floor over ; in this way no dust is raised.

All perishable goods should be bought as far as possible only as required. If the shopping must be done on the previous day, cover the meat or fish with butter-muslin to keep it clean, and prevent the flies settling on it. Butter-muslin is very cheap, and can be washed through and used immediately, and lasts for a long time ; it is well worth possessing a few pieces. It may be necessary to partially cook meat on the previous day in very hot weather ; if so, let it cool as quickly as possible. Pepper will help to keep flies off meat. If the food has been cooked, put it away on a clean plate and raise meat or fish on a stand so that it will not stand in gravy.

Fish should be well dried and cleaned before placing in the larder ; dusting with flour will help

to dry it. Meat or fish which seems slightly tainted should have the part cut right out and burnt, and then wash well in vinegar and water.

Vegetables.—Green vegetables must be kept very dry, or they will quickly decay and smell. Root vegetables require keeping in the dark, or they may spoil in colour by going green under the skin, or start to sprout at the top. Both require keeping very cool. Onions are particularly liable to sprouting.

Fruit.—Should have plenty of air ; soft fruits, such as currants, will not keep many hours. If they are picked and well covered over with sugar they will keep overnight without going mouldy.

Milk.—So much can be said on this topic that it will be dealt with in the other section fully. Absolute cleanliness of all vessels is essential, and a cover on the receptacle it is stored in. Too much care cannot be taken to keep a clean milk supply. A simple test to ensure good milk is to stand a half-pint in a glass with a thin bottom, and let it stand for 24 hours. There should be a good thick layer of cream, and lift carefully and look underneath to see if there is any dirt settled on the bottom—that might be the cause of your milk not keeping well. Store well away from strongly smelling foods.

Butter.—It is difficult to keep this hard in a bad larder in hot weather, so try this method. Thoroughly scrub a really large flower-pot, stand it on a large soup-plate covered with a piece of flannel which can touch the plate, and place a little water in the plate to keep the flannel wet. Put the butter into a basin which will stand inside this, and it will keep hard quite easily. Some people put the *butter* into

cold water, but this is a mistake for it takes the flavour out of the butter.

Bread very easily gets either dry or goes mouldy. It should be kept in a receptacle with holes in for air. A large biscuit tin with a few holes punched through the lid will often answer quite well ; but whatever is used, it should be wiped out with a dry cloth frequently to prevent mould or going fusty. It is better to rub with a dry cloth and only wash occasionally. Finally, the larder should be overhauled daily, or not only decay but waste is sure to take place. Also keep it well arranged, so that you can see the contents easily, and keep strong-smelling foods apart from other things. All jugs and sauce tureens on one part of the shelf are less likely to get broken than a milk jug hidden by a basin, etc.

PRESERVATION OF FOOD

When we speak of preserving food, your mind immediately thinks of jams and pickles, but preservation must go deeper than that. To preserve food means to keep it from decaying, fermenting, or going mouldy, and so we must thoroughly understand the causes of these and prevent them if possible.

If you watch a stream of sunshine across the corner of a dark room you can see small particles dancing about in it, which are certainly not to be seen in any other part of the room ; the light throws them up, and they are particles of dust, etc., not visible to the eye. We have to combat small foes of this type when we wish to preserve food. Contained in the air, as well as the dust, are multitudes of small plants too small for our eyes to see, and it is by these obtaining

their food supply and multiplying that our food is caused to decay, ferment, or go mouldy.

These plants can be divided into three distinct groups, bacteria, yeasts, and moulds. Bacteria you know of under the more homely name of germs; yeast makes you think of bread-making; and mould is familiar as the fluffy white stuff seen on bread, lemons, etc. These little plants have been classified, not so much by their appearance for they are all very minute, as by their behaviour and growth. They all grow very very rapidly. A single bacteria in 48 hours can produce thousands of others, and they do it by simply dividing in half. Dividing means there is no such thing as death or old age for them; for if a bacteria splits in two, it simply becomes two new plants, and so on. Taken by itself a bacteria may be harmless enough; but when they grow at this rate we are soon dealing with colonies, and they will not die provided the food is there. Some we can use for our own purpose, but the majority are destructive and cause us much trouble.

Bacteria do three kinds of work—

1. Produce decay,
2. Cause fermentation,
3. Cause disease—

and we are out to prevent them all when we use preservation. To do this successfully, we have had to study the way they grow most vigorously, and adopt the opposite measures.

Let us pay a little attention to each in turn.

Bacteria.—These grow best in a moderate, moist heat, and in the dark. Extremes of temperature such as freezing or great heat, or a bright light, will

kill many kinds; disinfectants or antiseptics will kill others. To grow they divide themselves in various ways, and have various shapes, to produce new plants and spores.

Spores can be likened to the seeds—they are not a full plant by dividing, but can grow into one just as a seed can. Now, although the plant can be easily killed, the spores are a great difficulty, and after the plants have all been successfully killed, they will cause trouble by starting to grow. Seeds are often more resistant than plants. You know in the garden how the winter frosts will kill the plants, and yet the following year up come a crop of seedlings from seeds which have been in the ground all the winter, so it is with these spores, though they are not the seeds of the plants; and to preserve definitely we must destroy these as well as the bacteria. One way is by submitting to a very high temperature for a period of time; another is to use a lower temperature to kill the plants, cover well to keep others out, then allow a few hours for the spores to develop into full plants and kill off as before.

Yeasts are quite another class of plants, and live in warmth and moisture. They also spread by dividing—we call it “budding” in these plants. The plants are tiny tiny round specks, which gradually grow into an oblong, then narrow in the middle, and finally break in half—two new plants. They live on sugar in any form, and as they use it produce carbonic acid gas and alcohol. This causes the food they attack to ferment, or go bubbly, because it is full of the gas. You have seen stewed fruit or jam like this, no doubt in the summer-time, and know that it has

a very sharp, acid flavour. They can also make spores.

Mould is familiar to you as a white fluff. If you could examine this under the microscope you would find white, thread-like filaments, with tiny black specks on the end and clusters of roots on the stems themselves. (You know how buttercups and strawberries can grow from roots which form themselves on the stems of the plant as they lie on the ground or from seeds.) The plants are not affected by dry air, so when a breeze or draught comes along they can be wafted to another part, the root is ready, the spores burst, and off goes another colony.

Now let us think how we can protect ourselves against them.

Bacteria are checked by light, extreme heat or cold, drying, and antiseptics.

Yeasts by extreme heat or cold, lack of moisture.

Moulds by light, extreme heat, lack of moisture ; very similar conditions in all three cases. Then, first of all the larder. It *must* be kept cool, dry, clean, light, and well ventilated, and that will go a long way.

Extreme Cold.—Ice will reduce the temperature until it will kill many kinds of plants, but it does not kill the spores, it only reduces them to a state of inactivity whilst the food is frozen. For this reason frozen food does not keep long after thawing, for the spores are still there in the food, and the food seems even less resistant to their attacks after freezing. It can be applied to meat, fish, eggs, fruit, and many other foods and is greatly used for transporting food from one country to another.

Extreme Heat.—Sterilization, or boiling. As with extreme cold, the spores are not always destroyed unless extreme measures are taken, but if we use a medium which boils at a high temperature we are more likely to be successful. Water boils at a temperature of 212 F., sugar boils at nearly 400 F., therefore boiling in water would probably give temporary preservation until the spores hatched out, but boiling in sugar will kill both, and give prolonged preservation. To be successful in such processes as jam-making, the food must be covered whilst hot to prevent fresh plants from settling, therefore do not leave for several hours uncovered first.

Drying.—Moisture is very difficult to abstract from many foods without spoiling them, but where this can be done, either with the food whole or shredded, there is good protection against the destroyers; for they can none of them flourish without it. Dried fish, fruit, milk, eggs, etc., are all very satisfactory, but unfortunately it is a difficult thing to carry out successfully at home.

Excluding the Air.—Very few plants can live without air, but it is also a difficult thing to expel air from our food, and it must be carried out by burying in dried powders, or by the use of tins, jars, etc. Eggs are sometimes preserved, and so are runner-beans, by covering with salt, sand, or sawdust; but even these contain a certain amount of air in themselves, and it is not very satisfactory. Usually the food is placed in receptacles with just a tiny hole left, and then subjected to a high pressure or temperature to kill both plants and spores present,

and drive out any air by the steam produced, and then the food is quickly sealed in, e.g. tinned goods, bottled fruits. Another method adopted with eggs is to rub the shells which are porous with grease or something similar, thus filling up the porous hole and keeping the air from entering.

Antiseptics.—These, which are a form of disinfectant as you probably already know, must be so mild in their action that they will not be harmful to the human being who is to consume the food, and yet prevent the growth of the plants.

Vinegar.—Used chiefly for pickles, chutneys, and sauces. A very successful antiseptic.

Smoke is frequently used for “curing” fish and meat. The smoke, which is obtained from wood fires, is carefully regulated, and gives additional flavour to the food, as well as acting as an antiseptic. The smoking dries the food at the same time, and so reduces the risk of decay through moisture.

Salt can act not only as an excluder of air, but also as an antiseptic if dissolved and used as a brine. It has been used since olden days for fish, meat, pork, butter, beans, eggs, etc.

Sugar.—Articles like sweetened condensed milk can be kept because of the high percentage of sugar present. Currants and similar fruits, when they have had the moisture driven off, are so rich in sugar that it acts as an antiseptic also, so that the fruit is really protected by two methods.

Salicylic Acid, Boracic Acid, Formalin.—These are added by commercial food-dealers sometimes. They

are excellent antiseptic preservatives from the food point of view, but unfortunately they are harmful to the human being who gets them in anything but the minutest trace, and their use is gradually being restricted by Government methods. (If you look at a cream container you will see a notice about the boracic acid on that.)

TINNED FOODS

We should sadly miss our supplies of tinned foods if they were suddenly withdrawn, for the art of tinning and bottling has now reached a very high standard, and enables us to obtain our food supplies from all corners of the world at reasonable prices, and in small quantities. Meat, game, poultry, fish, fruit, vegetables, soups, milk, made dishes of many varieties, are all ready to act as handy substitutes when fresh supplies fail.

Every housewife should understand something of the process by which they are obtained, and of what value they are to her family.

The food is generally placed in the container in an uncooked state, and as previously mentioned, heated under pressure to a temperature which will ensure killing any germs or spores which may be present, and of driving out any air from the tin. The containers are then removed and quickly sealed up, you will see a spot of solder on most tins if you examine the top carefully. If this is not successfully carried out, the contents will begin to decay, and this can easily be detected, because the pressure of the gases caused by the decay will cause the sides of the tin to bulge. Another point to remember is

that if it has not reached sufficiently high pressure to make the tin bulge, when you make an incision for opening the tin there will be a stream of gases rush *out* of the tin, and the exact opposite should take place—*air should rush in*. Do not use any tins with which this may happen.

As a general rule, however, food which has been treated in this way is really in a very pure and sterilized state *when opened*. But as with foods which have been frozen, they do not seem to resist attacks from bacteria, etc., as easily as fresh food. Empty the tin immediately, and use up the contents quickly when once opened, so for this reason buy the size you are likely to consume without the necessity of keeping. Fruit and foods cooked in a heavy, sugary syrup in the same way will keep better than those done in water, because of the sugar acting as an antiseptic, and oil also acts as a protection to some slight extent.

Another, and very great drawback to tinned foods is that the vitamins of the food are partially or entirely destroyed, and they are vital to life, and very necessary to the growth of children and health of adults. For this reason, more than any other, they should not be used freely, but only to supplement the food supply. It can be partially overcome by always having fresh food, such as fruit or vegetables, as part of the same meals ; but even then they should not be largely used for children.

Cost.—Many fruits are undoubtedly cheaper to buy ready to use in a tin than fresh. Fruits such as peaches and pineapples from abroad would otherwise be far beyond the purse of many housewives,

but products which could be done at home, especially meat and fish, are cheaper if done at home. For instance, a pound of fish, gently cooked in the oven, would be far cheaper than a large tin of any kind, and quite as tasty, so to use them repeatedly is really extravagant. Another item which adds to the cost is the necessity of having to use quickly; if any quantity is left, it may be wasted before it can be used in condition.

Purchasing.—Full notes on this are given under the heading of marketing, and the new system of grading and marking the tins is also fully explained there, but attention must be drawn to tinned milks. This commodity is put up in several forms: (i) as a dried powder with cream; (ii) with only half-cream; (iii) with no cream, but skimmed; (iv) in a heavy syrup with sugar as a preservative; (v) condensed by partial evaporation, with full cream; (vi) condensed in the same way without cream. Naturally they vary very greatly in price according to the contents and the cost of production. Very great care is taken in the manufacture of the first two dried milks, with full or half-cream, as they are chiefly used for feeding young infants. This increases the cost, so that the poorer people try to use the cheaper kinds, and think any other will do just as well. Skimmed milks are labelled “unfit for infants”, and this should be very strictly adhered to, for babies need the fat, and it is likely to be far more expensive than the cost of the milk if the child becomes ill. With all the preserved milks there is a fear of vitamins destroyed, and it is for this reason that children fed on them must also receive some fresh fruit-juice each day, or they

will soon be ill, however good the brand chosen or the appetite of the child.

It will be seen that the wise shopper can find the tinned foods a useful and handy supplement to the larder, but to the careless shopper they may prove expensive, wasteful, and a source of danger to the family, and it is this we have to guard against.

FOOD POISONING

We very seldom hear of cases of people becoming poisoned through eating ordinary foods, but occasionally it does occur. Generally these cases appear in the summer-time, when the weather is warm and moist. In the previous chapter we saw how such conditions are ideal for the development of bacteria. The poisoning is usually due, not to bacteria in the food, but to poisonous "toxins" in the food. A toxin is the poison manufactured in the food by bacteria. Now bacteria are destroyed by heat, but toxins are not. If the meat from which sausages, pork-pies, etc., were manufactured was affected by bacteria owing to the heat, these would be killed by cooking the meat, and it would appear perfectly eatable, but the toxin would be there all the same, and give rise to this poisoning. On investigation into cases of food poisoning from meat, it is frequently found that the meat was stale or the goods had been made for several days. Pork and veal are very susceptible in warm weather, and are safer left alone.

Poisoning from tinned foods may be from two causes, first the one mentioned above, tainted food used for tinning; or, secondly, being left exposed to

the atmosphere for a considerable time after opening. If good reliable brands of tinned goods are bought, the first cause is likely to be very remote, but if the cheapest procurable are purchased one cannot expect the contents to be beyond reproach always. The second reason can easily be protected against also. There is no doubt that after food has been cooked in tins it is more susceptible to attack by bacteria than that which has been freshly cooked. The food should be turned out of the container at once, and the contents consumed at one meal, if possible.

Poisoning from shell fish. These are the recognized scavengers of the sea, and occasionally become infected with the food on which they feed or through sewage contaminating the water where they live. Certain parts of some of the fish are not edible, and will give rise to poisoning if eaten ; but, in any case, it is risky to gather fish from unknown sources and eat them.

General remarks. Some poisoning is quite unavoidable, as the food gives no sign of contamination, and may have been carefully prepared, but frequently it is trying to use up food in hot weather which gives rise to the trouble, and it is better to err on the right side sometimes and not use stale food rather than run any risk. Always avoid food which has an unpleasant smell or is a peculiar colour.

CHAPTER III

CATERING

THE word "catering" conjures up difficulties in so many minds. It is all very well to be asked to prepare the meals, but how very different to feed a family for a week on a certain amount of money, and not to be short of, or provide too much of, any one thing! Yet it is a fairly simple matter if there is a good knowledge of the materials used in cookery, their method of preparation, time to allow for cooking and serving, how much to supply per head, and the food value of the dishes. Let us divide it into sections, and deal with one point at a time.

How much to spend on food.—This is regulated by the family income, the number in the family, their age, and their social position. Roughly speaking, it will take half to one-third of the income to provide the food. I say that the income rules supreme on this question, for the person who has to be very economical will have to give far more thought to the values of the various foods, than one with more freedom of choice. You will learn in the Dietetic section the real value of each food, and you will find that a herring is as nutritious as a steak of salmon, and that only a small sum expended does not, of necessity, mean that the family will suffer from inferior foods, but undoubtedly the person who feeds a family well on a small income must give much thought and study to it. Always keep account of the money you spend at the various shops, and enter it under its own heading in a book. If your money

does not go far enough, you can see at a glance where your heavy expenditure is, and where you may be able to economize. Allot so much, and try to keep within it. It would be a splendid thing if all girls kept accounts of the spending of their own pocket-money, ready for the days when they will be called upon to handle larger amounts. The number of members in the family will decide the quantities to be purchased, for nothing can be less attractive than the same food day after day, be it never so tasty, because the person responsible purchased on too generous a scale, and what a tragedy it is if there is insufficient! The age of the people must also be taken into account, for little children do not require very much per head allowing, whilst boys and girls in their 'teens usually have tremendous appetites. Where there is a family of mixed ages, this works out to an easy average to purchase, but in the small family it would not do so, and individual reckoning would have to be taken. Particularly should extra care be taken when additional people are to partake of the meal. For the fear of not having sufficient, very often the housewife largely over-caters, and the family get so tired of "eating the bits up", however cleverly they are disguised, and it gives the housekeeper endless trouble to devise such means. The amount of entertaining which must be done also greatly affects the catering and the amount, therefore, to be spent. Some families are constantly called upon to entertain people, or there may be just a pure love of entertaining friends, or people may have a permanent invalid in the house and want to cheer life up a little. Do not forget to realize that although this may be very nice, it puts a very great strain on

the household finances, and that it is difficult to use economy without appearing mean, and nothing could be worse than for the visitor to feel this and think they were unwelcome. If you cannot afford to entertain, be firm and say so, and do not make the whole family suffer for the sake of appearing better off than you really are. Entertain wisely and on a scale you can manage. Give some light refreshment such as a warm drink daintily served, and a little cake, instead of inviting them to a meal, you will enjoy their company quite as much.

ECONOMY IN THE KITCHEN

Even in the wealthiest household there is need for economy. Economy means finding a substitute of a cheaper nature which will give an equally satisfactory result, without undue expenditure of time or energy, or using up what would otherwise be wasted. Not only in food, but in many other ways economies can be effected in the kitchen which will make the family income go further, but we will restrict them here to those which affect only the preparation, cooking, and cleaning up after a meal.

Fuel.—Do not waste this by careless management. Full details are given for economic use in the section on the Kitchen, and the management of stoves, and these should be carefully noted; so frequently cinders are to be seen in dustbins which would have kept the fire burning for hours. Remember to “damp down” the fire when no longer in use, or if it must be kept in to cook again for the evening meal, use balls of wet newspaper, well squeezed, or coal slack to keep it in.

Newspapers are invaluable in a kitchen. They can be used to protect surfaces from getting dirty, and when cleared away utilized as above for the fire. They will have saved time, labour, and soap or other cleaning material by their use. Rub greasy things well with paper before washing up, and use the paper for lighting the fire. Paper fire-lighters are a good way of using up newspapers, and quite save the need for buying wood, so dirty papers can also be used up in that way, and they can be used in the place of dusters for many purposes, polishing and rubbing up grates, etc., or soft paper for polishing glass ; this is true economy of labour and goods.

Cleaning Agents.—Soap powders, scouring mixtures, metal polishes can all be made more cheaply at home than bought by the packet, and recipes are not hard to obtain where Domestic Science Teachers are available to ask. Soap powders, for instance, are usually composed of half soap and half soda well crushed together. They are certainly very handy for producing a quick lather for washing-up, etc., but a pound of soap and a pound of soda could be purchased for $7\frac{1}{2}d.$, and you will have to pay more than that for two packets ready mixed which would not weigh nearly two pounds. Why not rub your soap on a grater as you need it, and add a little soda to the water ? Again, cinders finely sieved make a splendid substitute for bathbrick and emery paper, they are only a few moments' work to do, cost nothing, and so we can go on. By using the brain, money can generally be saved, it is your most valuable asset.

FOODS

Bread is apparently wasted more than any other single food, for it is almost impossible not to see signs of it in gardens, dustbins, and streets. Stale bread can be used in so many sensible ways. If nothing else, break the white crumb from the brown, rub lightly in the hands to break into crumbs, and dry slowly in the oven. They will keep indefinitely if you have driven off all the moisture. The brown crusts make raspings for coating boiled meat, fish, rissoles, etc., and the white crumbs can be added to all boiled puddings or steamed puddings instead of using all flour up to the amount of half-and-half quantity, greatly improving the pudding mixture thereby; it uses the bread and saves on flour, so is a double economy. There is also toast, hot or dry, everybody likes it, and if butter is scarce good dripping makes an excellent substitute, whilst margarine is far nicer on toast than on bread. There are also many recipes for bread or bread and butter puddings, but sometimes the additional ingredients required to use the bread up make it a by no means cheap and economical pudding in the end, so I state it as a last resource, for it is not the most economical way of using bread up.

Milk.—This should always be boiled if it must be kept at all in warm weather; but if the milk should go sour it can be used for making batters, scones, or cheese. The latter is the least trouble, and is not well known in all districts, though Lincolnshire specializes in these cheeses and has a tremendous sale for them. Allow the milk to go really solid, add a little salt and stir, it well in; then pour the

whole contents of the receptacle into a piece of muslin, and tie it with a string having a loop end. Hang to drain for several hours, and when it has finished dripping shape into a nice "pat", and leave to ripen. Some people like them fresh, and others prefer to leave them a week or so to go "high", as the flavour is deepened in this way. They are really delicious, and there is no waste of any kind, for the liquid out of them can be used to mix cakes, if it is saved.

Cheese can be grated and used up in many recipes. Almost any cooked vegetables can be made appetizing again if cut into neat pieces and warmed in a good white sauce to which cheese has been added. Decorate the top with a little cheese and brown it by grilling in front of the fire or under a grid, and you have an entirely new dish.

Meat or Fish can be re-seasoned, re-moistened, and gently warmed in a sauce or gravy, whilst bones should go into a stock pot for soup before being thrown away, as they so often are. You will say that all these things require time, and it is not always available. It is always available if brains have been used, for most of the preparation can be done in odd minutes, and the whole quickly finished off, or they can be chosen for meals giving more time for preparation, like supper, when housework is out of the way.

THE ARRANGEMENT OF THE MEALS

The importance has already been pointed out of regularity, both on the part of the preparer and the part of the partaker of the meal, but it cannot be too firmly emphasized. Nothing is more irritating than

to be kept waiting on either side, when ready for a meal. Where one pair of hands has everything to do, hours should be fixed convenient to all the members of the household as far as possible. If several people leave the house in the morning between 8.20 and 9 a.m., make breakfast at 8 o'clock, and do not have it on the table for nearly an hour. It is unfair to the person who is preparing it to give so much extra work for the sake of a little personal indulgence, and yet in so many households it is such a difficulty to get the people out of bed those few minutes earlier, and schoolgirls are some of the worst culprits in this respect. Show more consideration for all the work that has to be done to make your home a clean and comfortable one. The caterer should remember that the number of meals may vary. In England we usually have four—breakfast, dinner, tea, and supper; but in America and on the Continent three as a rule—breakfast, a light lunch, and a good evening meal. Such a rule might possibly suit your household better, there is no hard and fast rule in these things. Meals should be the servant of the household, and not the household entirely dominated by the meals. That is a dreadful catastrophe when it happens.

ARRANGING THE MENU

In arranging the meals several very important points come for consideration. We have already considered the money to spend, the number to buy for, the age of the members, and the time and number of the meals we intend to have; but still others call for attention, too. The meals must be well varied

day by day, and even in one meal the flavours of the dishes require to vary, and not to serve two very much alike in flavour. There is the time required for preparing the food, on busy days very simple dishes must be chosen to leave the housewife free for other duties ; there is the season of the year, or the prevailing weather (which may be very much out of season) to think about ; and, looming larger than all, come the personal tastes of the family. These can be largely cultivated by the caterer to become general, and it does not do to indulge fads and fancies too far. Try serving the food in any other way and promoting a liking for it if it is a general thing, or insisting on small quantities being taken until the taste is probably cultivated. Children require teaching what to eat just as they do what to wear, and a great deal can be done by a wise mother.

As a rough guide for the amount of food to purchase, the following list will be useful until more experience is gained of the family capacities :—

Soup, make $\frac{1}{4}$ – $\frac{1}{2}$ pt. per person.

Meat, buy 4–6 oz. per person.

Fish, 6–8 oz. per person.

Potatoes, 4 oz. per person.

Vegetables, 8 oz. per person.

Boiled puddings, make up 2 oz. flour per head.

Milk puddings, make up $\frac{1}{4}$ pt. milk per head.

This will allow for unavoidable waste, trimming, bone, etc.

Breakfast.—This meal must be quickly prepared, or so much preparation made previously that it can be quickly and easily finished off. It must also be quickly cooked, and for this reason grilled or fried

food is very often served, and remember that small portions or thinly cut food cook more quickly than large thick pieces. This meal precedes the hard work of the day, and usually the greatest mental and physical effort is put out in the morning, so the meal must be capable of equipping the person for this effort. It must be thoroughly nourishing, and energizing. Always have a tempting table, as many people require urging to eat breakfast more than any other meal, and also it gives a pleasant start to the day to see a nicely laid table and sends them out to work in a happy frame of mind.

Suggestions for Hot Weather.—

Cereals, such as Force, Shredded Wheat, Grape Nuts, Puffed Rice, etc., and fresh or stewed fruit.

Cold ham.

Potted meat.

Pickled herrings.

Galatine of beef.

Pressed beef.

Galatine of veal.

Potted salmon.

Eggs, cooked in various ways.

Tongue.

Brawns.

Cold sausage.

Pork-pie.

Crisp lettuce and tomato to eat with the meat dishes, and marmalade and toast to finish the meal.

Suggestions for Cold Weather.—

Porridge or hot milk for the cereals.

Bacon, either alone or with tomato, eggs, kidney, liver, as an occasional variation.

Grilled or fried kidneys.

Grilled or fried liver.

Fried fish.

Fish cakes.

Potato cakes.

Finnan-haddock.

Kippers.

Sardines on toast.

Sausages.

Eggs, cooked in various ways.

Rissoles.

Omelettes.

Grilled ham.

With marmalade and toast, etc., to finish the meal, and a little fresh fruit on the table if desired. Fruit is better in the morning than at any time during the day.

Midday Meal.—This will depend upon the family. Where they are all adults in business a light midday lunch is frequently taken out with them, and a good substantial meal eaten when they come home at night. This is a very good arrangement, as the body is then at leisure for digesting the heavier food of the day, and it will digest much better than during a period of either physical or mental work. If there are children in the house, the heaviest meal will be served at midday, for it would be too near to bed-time otherwise, and they are also such active little people and use up so much energy that they are ready for a solid meal by the end of the morning. If the midday meal is a light repast, frequently

dishes can be made from the previous evening's meal. If it is the chief meal of the day see that it is a well-balanced meal and suitable to the weather, etc. Soup makes a cheap and satisfying first course, but should be well varied in flavours, and this should then be followed by meat or fish with vegetables, and a sweet pudding. Soup is a good way of utilizing the bones and scraps, and economizes for the meat and pudding course. For the meat course, remember that a joint will always come out more economically than a number of small dishes, as meat carves very economically when cold, though it seems to go rather quickly whilst hot. For variation made dishes—rissoles, croquettes, cutlets, chops, steaks, omelettes, curry—can all be used if required ; indeed, the meat and fish cause little anxiety if you know how to choose them. The chief point is to see that the meal, as stated, is well balanced, and if you understand food values there is no reason for it not to be.

Teas.—These, again, vary with the type of meal either preceding or following it. It should always be one of the happiest meals of the day, for then the work is over and members of the family are all looking forward to a few hours' relaxation, so they are in a happy frame of mind. Whatever is served, let the table look appetizing. If a simple meal of jam and cakes is to be served, vary the bread and butter occasionally with scones, tea-cakes, muffins, or toast, and replace the jam with fish-pastes, fresh salads, cress, etc. If the tea is a substantial meal it is called a " high " tea. These teas are very popular in some parts, as they require less preparation than an evening dinner, and yet are satisfying after a

light luncheon. They should follow a selection of dishes similar to those suggested for breakfast, and the smaller dishes suggested for midday dinner, and cakes and scones are served as well, instead of a pudding.

Supper.—As previously mentioned, this may be the midday meal of the day postponed, and rightly called "late" dinner, and if so it would follow the rules accorded to that meal. Generally people who have late dinner finish with a cup of coffee if a simple meal is served, but as time is not precious at this hour, if they can afford to do so, the dinner is sometimes made more elaborate and there are several courses, for there is the time to sit and enjoy it. On the other hand, supper may consist of anything from a meat dish and a sweet pudding, down to a glass of milk and a piece of cake, and be taken anywhere between 8 p.m. and 11 p.m. It just depends upon the family tastes. If the supper is served at a late hour, it should be something light and easily digested, fried foods are not suitable nor are pastry dishes. It is sometimes unavoidable to have a late meal, but they are not wise. Keep to lightly cooked fish and easily digested puddings of the milk variety, etc., if the hour is late, but see that the meal is nourishing, nevertheless, if the people who are to partake of it have had a tiring, strenuous evening. It would be better to put the supper on early and keep one portion warm, than to penalize everybody because one member is to be late. If the family includes an invalid, somebody elderly, or anyone whose digestion is inclined to be weak, they should have supper at least two hours before retiring for

the night, or it may otherwise cause restlessness. For a selection of supper dishes, similar lines to those suggested for a high tea would be found suitable.

SERVING

One of the most attractive parts of cookery is the serving of the food, for here really individual choice can be exercised.

To give food a dainty appearance should appeal to everybody. When we decorate food we call it "garnishing" the food. It can be carried out either with some of the ingredients forming the dish, or additional ingredients may be used. For instance, boiled carrots and turnips can be used to decorate a stew having them in, or sprigs of parsley may be used instead. In the first instance the garnishing is something we can eat with the dish, and in the second it is not. This little detail worries some people very much, for they think a garnish *must* be something which is eaten with the dish decorated. It can be any food ingredient, cooked or raw, which will serve the purpose, and be quite harmless. Brightly coloured foods are employed chiefly—tomatoes, beetroot, lemon, cheese, cress, parsley, etc., are the most usual, but they must tone with the dish and with each other when used.

First of all have attractive dishes. Do not serve food on a plate when you have a meat or vegetable dish in the cupboard. They are made for their particular work, and both look better and are more suitable. A vegetable dish has a curved side to aid in serving, a meat dish is deep to catch the gravy as

it runs out, and both require the same amount of washing-up, plate or dish, yet frequently the wrong utensil is used, merely because it was "handy". The careful cook does not rely on things being handy at the last minute; for hot food or cold the dishes should be just as carefully selected as the ingredients. Be sure that hot food is served on really hot dishes, for the thick crockery of which they are composed takes the heat very rapidly from the food, and nothing is so unpalatable as half-cold food, and what a pity to serve a nicely cooked meal so badly that it is spoilt by a small detail after all the trouble taken. Care must be taken in warming the crockery, if it becomes too hot the glaze is cracked, and we get those disfiguring brown cracks all over the surface; or they can be broken by heating too suddenly over a fierce heat. Put to warm in a gentle heat and allow plenty of time. If that is not possible, and with small gas ovens it is always a great difficulty, a good plan is to have a deep bowl of hot water ready, and when quite ready to dish up, immerse the crockery for a few seconds.

Always arrange the food nicely whether garnished or not, and wipe the dish free from gravy splashes or signs of boiling over. For instance, do not turn an Irish stew straight out, anyhow. Select the largest pieces of potato and put them down each side of the dish, and serve the more broken portions in the centre, as a bed for the largest pieces of meat to be laid upon. If a small spray of parsley or watercress is added at each end, how very different that dish will look to one which is carelessly tipped out. The time needed is negligible, and the cost no more; surely it is worth it?

It is *well* worth it for more than the pleasure given to the eye. You sometimes say "your mouth waters" at something good, and so it does. Attractive food, either to the eye or the nose, causes the digestive juices to begin to flow, ready to receive it as it were, and this means that when the food is eaten a plentiful supply of juices are ready to receive it, and it is better digested and you receive more benefit from it than you would have done.

Secondly, dainty food is elevating to all who partake of it, it stimulates a desire for order and neatness ; whilst food which is badly served is absolutely degrading to everybody at the table.

Several important but general rules must be borne in mind when garnishing.

1. It must be dainty, both in appearance and in quantity.

2. It must not predominate over the appearance of the dish.

3. It must not interfere with the carving of the dish, but be easily removable, if necessary.

4. Do not allow hot food to become cold by choosing an over-elaborate garnish, but choose something very simple and easily applied.

5. Do not garnish hot food until ready to serve. Colour from beetroot, etc., may "run", and spoil the appearance you were striving for, and fresh green-stuff will go limp with the heat.

6. Do not mix too many colours.

7. The colours must harmonize.

8. Sliced foods must be thinly and evenly cut, and may be sliced as rings, crescents, squares, etc.

The following are a few hints for the beginner on garnishing :—

Soups.—A few very thin strips of vegetable to float on the top, or a little dried parsley put as a fine streak right down the centre of the dish. Serve small squares of toast to eat with it.

Fish.—Both green and yellow go very nicely with fish, and as lemon improves the flavour, we usually garnish with fresh parsley, and lemon cut into fancy shapes.

Hot Joints.—Remove string which has been used to keep in shape whilst cooking, and skewers if possible without making the joint difficult to carve ; place on a suitable dish, and garnish with parsley.

Cold Joints.—There are two methods to choose from : (1) Turn the joint over to hide the cut part, and carve from a fresh surface. Garnish with tomato and parsley. (2) Cut neat slices in the kitchen, and do not put the joint on the table. Arrange in neat layers, and garnish with rings of beetroot and onion, or as suggested. Do not mix beetroot and tomato, as they clash. (This second method allows very economical carving to be done.)

Bacon and Ham.—If boiled, the rind should be pulled off whilst hot, and the surface sprinkled with fine brown raspings. If cold, decorate the back of the ham if a large piece, or the dish only if a small piece, with parsley. If served hot a few young carrots at one end of the dish, nicely arranged ; add a pretty touch of colour with the fresh green of the parsley.

Vegetables.—These lend themselves in endless ways to pretty dishing. If they are mashed they look very attractive if quickly drawn into a pyramid with a fork, arranged quite in the centre of the dish.

With all except green vegetables, a touch of green dried parsley can be safely added in a tiny sprinkle on the top. If coated with a sauce, a fine sprinkling of the dried parsley can be put down the centre of the dish in two narrow stripes. Whole vegetables can be served all facing one way, reared on each other as a pyramid in the centre, or in a neat pile with those of the best shape put on the top.

Salads.—Here the cook is offered a wonderful scope.

Green Salads.—Make in the usual way with a mixture of a lettuce and any of the following: cucumber, onion, radish, beetroot, tomato, potato, selected as desired. Finish with a layer of green on the top, and decorate with finely cut slices or cubes of one or more of the ingredients below, any colour looks well on the green. Do not use beetroot and tomato together, they clash.

Plain Salads.—Such as potato. Have a smooth top to the dish, arrange with overlapping rings arranged round or across the dish, and have a little touch of colour from some other vegetable in the centre.

Fruit Salads.—Here, again, choose fruits which go together in a pleasing manner, both for flavour and colour, and finally decorate the top with a few tastefully arranged pieces. Whipped cream is often used as an aid to garnishing a fruit salad, and, if daintily applied, looks very well against the coloured background.

Fresh Fruit.—Rub hard fruits well with a cloth and they will shine. Cut grapes, melon, etc., into small portions which are handy to take as a serving.

Cakes.—Serve on a nicely polished glass dish or pretty plate, with a doily, if only of paper. In icing avoid crude colours, they are very bad taste, and other decorations should always be added sparingly. Particular care must be taken not to make it impossible to serve by having a large, hard centre piece. Such are frequently to be seen for sale in the shops, and are not at all suitable or dainty.

Pies.—Wipe the dish clean and stand on a dish to fit, so that it stands quite steadily. If a savoury pie, place a spring of parsley on the dish ; if a sweet pie, sprinkle a little sugar on the top. Pie frills can be bought for 1d. each, and if carefully used will last for a long time. They make a pie look very attractive.

Puddings.—Decorate the top of a plain pudding with a little brightly coloured jam, and place just a little sauce round the base in a neat ring. It is not a good plan to pour the sauce over the pudding, as very frequently it soaks in and makes the pudding sodden before it is eaten.

If these hints, coupled with those to be found in many good cookery books, are followed, I am sure you will never again wish to see food carelessly prepared or served.

Dried Parsley, mentioned several times above, is made very easily. Pick the parsley from the stalks and place on a shallow tin in a very cool oven. Leave until it is quite dry, and rub between the palms of the hand until reduced to a very fine powder. If properly dried it retains its vivid green colour, and is useful for garnishing because it is so much finer than fresh parsley chopped unless very great care is given with the latter, and even then it cannot be

sprinkled on to things as easy as the dried. It will keep for a long time if placed in an airtight tin.

The Dining-room.—Whether this is a room set apart, or the one in which the food has been prepared, it should be clean and tidy when the meal is served. If the sink is in the room, pack the things neatly together, and it is a very nice plan to have a clothes' horse made into a screen with a piece of pretty cretonne, which can stand in front to hide it. If it is winter-time, have a good bright fire and a warm room. If the dining-room is warmed with a gas or oil stove, see that they are alight in good time, as a cold room will detract from the most appetizing meal. If it is the summer, especially if the kitchen is to be used, be sure to have the window open to let in the fresh air, and help to freshen everybody up.

The Table.—Many people with a polished top to the table have dispensed with tablecloths and now use small mats to save washing and the cost of providing tablecloths. If such a plan is followed, be sure to have a plentiful supply of mats, or the table will soon be scratched, and see that they will not allow the heat to go through, or it will soon be marked with rings from the bottom of hot plates and dishes. Rubber or asbestos mats are the most satisfactory, cork are good if they are thick, but the thin ones or raffia mats are not sufficient protection. If the mats are covered, brightly coloured linens will be found more serviceable than white, which show every mark, but pretty colours in the rubber mats make a cover unnecessary. If mats *are* used, see that the top of the table is well polished each time after

use, and does not show smears from butter or gravy previously spilt, or finger-marks. If rubbed with a soft duster each time they are easily kept in good condition. If a cloth is used, however coarse, let it be clean, and whether ironed or only well mangled, do not have it rising in the middle for want of pulling square first. When the meal is over, take the crumbs off before removing the cloth, and then fold in its own creases. Do *not* gather it up in your arms, shake it vigorously outside, regather into your arms to bring it in, and *then* fold it. How can any cloth look respectable after such treatment? and is it any easier to carry out? and yet how very very frequently it is done.

Decoration.—Having prepared the table, try hard to have some simple decoration in the form of a vase of flowers or a fern. Do not have a heavy plant to lift each time, or a high vase of flowers, which will easily knock over. Have it low enough for people to see through or over quite easily, light to lift, and steady on its base, but it makes such a great improvement to the finished appearance of the table.

Laying the Table.—Collect all the necessary equipment on to a tray before laying the table. Have a complete knowledge of the food for the meal, and the number to be laid for. If tea, coffee, or cocoa are to be served, it is a very good plan to have a small tray to pour out on. Accidents will happen, or if there are any drippings from the spouts, they then do not mark the large cloth. Arrange the correct number of cups and saucers on the same tray, and have the milk, sugar, tea-strainer, and basin either

on the tray or at the edge of it, on the table. See that the handles and teaspoons all go in the same direction, convenient for lifting, have stands for the teapot and hot-water jug, and a "cosy" if required.

The Joint.—Very frequently the serving of the joint will mark the cloth with splashes of gravy due to poor carving or insufficient room on the dish for the gravy as it runs from the joint. A very good plan is to place a loose cloth where the carving will take place. Old tablecloths will often supply an oblong piece suitable for the purpose, or a serviette will answer the purpose for a small joint. These are easily washed and ironed, and make the large cloth last longer.

A Small Child must have the cloth protected also ; a piece of white oilcloth is the best thing, and let it be large enough. When not in use *roll* it up, do not fold it for it will crack the surface and allow gravy, etc., to go through the cracks on to the table below.

Equipment.—It is not necessary to have expensive equipment to have an attractive table. It only needs to be clean, well polished, and freshly attended to, whether metal, glass, or crockery. There is a vast difference between a half-empty jar of jam on the table, and the same placed in a smaller quantity into a dish which cost probably only 2d. Butter, jams, pickles, mustard, etc., should all be placed in clean dishes for each meal, and knives should be brightly polished. If they are cleaned as used, they are always ready for the next meal, and do not put out large quantities, but just sufficient to use at that meal. All these details are the essentials of an attractive

table, and if not attended to the finest silver or cut-glass could not make the table look tempting or appetizing. The principle dish is usually placed at the head of the table, and other things for general use, arranged as convenient, e.g. father will probably carve the joint ; mother would serve the vegetables ; and pickles or sauces would be to the centre of the table for everybody to reach conveniently. The tea-tray is usually placed at the head of the table, and should be slightly on the right-hand side of the person who is to pour out. Now collect all apparatus required for carving or serving the entire meal, and finally the personal apparatus to be required, correctly numbered.

For most meals a small plate is required for each person, on which to place a piece of bread, and this should be placed at the left-hand side. Knives and forks should be so arranged that the plate can stand conveniently between them, with the blade of the knife facing the plate. If more than one knife and fork is required they are arranged side by side, but so that the one to be used first is on the outside. For instance, a knife and fork for meat and a smaller knife for cheese—the cheese knife would be inside the meat knife and next to the plate. If soup is required, the spoon will stand outside the knives, but the spoon for pudding is placed across the top of the plate with the handle to the knives and the bowl to the forks, and a fork should be laid with it in the opposite direction, the prongs to the knives and the handle to the forks. If a glass is required it stands at the right-hand side, well on the table. A serviette should be placed either between the knife and fork or to the left-hand side.

CARVING

A great deal of responsibility rests upon the person who is to carve the food after it has been prepared for, and placed upon, the table. Soft food, such as puddings and vegetables are a simple proposition, but with a joint of meat it greatly affects the economy of the joint whether it is correctly or incorrectly carved.

Even with vegetables and puddings some thought is required so that each portion is nicely shaped, and sufficient in quantity. As a general rule, it is better to give a rather small serving and ask to replenish the plate if it appears necessary, than to give a large serving at first. To be a guest at a meal and to be supplied with more than you can comfortably eat is worse than to have a little balance in the opposite direction. Small portions also look much more dainty and appetizing.

To carve a joint well requires real skill and plenty of practice. One of the best ways of learning to carve a joint is to ask if you may have a try at home occasionally, when you can be shown if you are wrong, but a few useful hints here may be a help.

1. Take every opportunity to examine the bones of joints which are finished, and see how the meat covered the bones, and how to separate the joints.

2. Examine uncooked joints, see where the bones and joints are, how to separate most easily, and which way the muscle of the meat runs.

3. Before cooking see that any bones which the butcher should have cut through are really loosened, e.g. chop-bones in a loin, each should be separate at the base, or removed entirely (called chining).

4. Do not have gravy served round the meat, but in a separate tureen or small jug. Have a tablespoon at hand to serve out the gravy which accumulates as the meat is cut, or it may splash on the cloth.

5. Do not have the dish filled with vegetables, e.g. baked potatoes. A few small pieces may be allowed for garnishing, but they must not interfere with the carving.

6. Stand within comfortable control of the joint, do not have to stretch unduly.

7. Place the fork firmly in the joint before attempting to cut, and have it well out of the way for getting a clear slice. This may mean putting it in at the side, and not the top, of the joint.

8. Raise the guard on the carving fork. It is there to protect you from accidents.

9. See that the knife is really sharp, especially at the point, and has a blade which will bend fairly easily.

10. Have the plates well up to the dish.

11. Always cut the meat *across* the grain, and not the way of the grain.

12. Keep the knife steady when cutting and do not jag it through the meat.

13. Serve in neat pieces rather than large slices until proficient.

14. Serve the fat and the lean so that there is a mixture of each on the plate, and not one serving disproportionately fat, and the next lacking.

15. Cut several portions, and lay the pieces on the dish before attempting to serve anybody, as this greatly assists No. 14, and is one of the most common faults with a beginner.

16. As a general rule carve thinly, but pork and mutton are served thicker than other meats.

17. Do not cut from several different places, but work steadily through from the point where you commenced. To cut the lean in several places only allows the juice to run out.

18. Leave the joint looking neat and tidy, not a number of small ragged pieces attached.

19. As necessary, remove the skewers and lay on the dish.

A good carver can serve in such a way that every piece is appetizing, tempting, and well shaped, and at the same time he cuts so cleverly that there is no waste. Badly carved, a joint can prove most extravagant and expensive, so that it is really very necessary to know where to start carving from, and there are so many joints it is rather difficult to memorize them all. Here, again, the butcher will most willingly come to your aid. He has cut the joint from the animal and knows exactly what to do with it. When you have chosen your piece of meat ask the best place from which to commence carving, and then you will soon memorize the various joints and be able to cut them to advantage.

Rabbits, Birds, etc.—Rabbits can be cut by the joints before cooking, and it is the best plan for an inexperienced carver to adopt. Chickens, etc., the legs and wings are served as portions, and the joint must be neatly cut through. A leg is cut at each joint, making two servings, and if large the larger half is sliced occasionally. The breast is cut lengthways with the bird, in thin slices, just above the wing.

Carving Knives.—A thin, pliable knife is the easiest to carve with, but on account of the length of the blade, they are never as thin as a table knife or they

would not stand the pressure and strain put on them. A good fine point is required, and these do vary very much in shape. When the edge wears off it should be sharpened on a good steel or a proper knife sharpener. It is not a good thing to sharpen it on the window-sill or the doorstep. Do not ever let it get really blunt. When the edge has worn away, as it will, send it to be re-ground, which is only a matter of a few pence, and will greatly prolong the wear of the knife. If a steel can be properly used it takes less from the knife than the new-fashioned sharpeners, which are like two small wheels. A steel is usually provided with each set of carvers, and is suitable for the knife. See that the fork has a good guard on it with a strong spring. Should it get broken wire guards to replace can be fitted for a few coppers.

BEVERAGES

Whatever the meal, beverage of some description will be required. Here, again, remember the importance of clean, attractive containers. Cocoa may be served in the cheapest of jugs and look attractive if the jug is clean and has not dribbles all down the side. For the three popular hot drinks—tea, coffee, and cocoa—there are now most attractive aluminium utensils which are unbreakable, but the great drawback is that so often people seem to think they are uncleanable also !

Mention has already been made of the advisability of serving the hot drinks on a small tray, and we will deal with these first, as they are used in every household.

Tea.—This is the leaf of a small plant grown in the East. The first picking made from the low bush on which it grows is a small leaf, and this has the finest flavour; after this other crops are obtained, and these are not quite so fine in quality, and so are sold at a cheaper price. Innumerable mixtures (or blends, as they are correctly called) are made to suit various tastes, waters, and purses. Choose your tea carefully to see which will suit you the best and which is the cheapest in the end. It should be made with absolutely boiling water, freshly boiled, as this uncurls the twisted little leaves and draws the essence out of them. If the pot is cold into which you pour your boiling water, it cannot possibly be absolutely boiling, so to prevent this you should first of all rinse the pot well with a little of the boiling water, allow it to stay in for a few seconds, and have a really hot pot ready to use. Into this place a small teaspoonful of tea for each person, and one in addition up to four or five spoonfuls for the average pot to hold one and a half to two pints of water. Now pour the boiling water over, leave it for three minutes to draw out the essences, and pour off the tea. It should be an amber-coloured liquid, with a refreshing smell. In pouring out tea many people have a little fad, and like to have the milk placed in the cup before the tea is poured in, but unless you know how much milk your guest likes, it is better to hand both milk and sugar for them to use themselves. When you have poured out the first cups of tea, fill up the pot with more boiling water for a second cup. Be sure this water is boiling. If it was poured into a thick china jug, and has been standing on the table for some minutes, it will be decidedly cool, and so will the

second cup of tea for everybody. Do not keep tea standing for people who will be coming in later. As it stands the leaves begin to send out a substance called tannin, and it is this which is so harmful to the digestion and nerves. Just make sufficient tea for the meal, and make fresh again for the late-comers; If very strict economy is necessary, and only a small amount of tea can be purchased each week, rather than keep the pot standing pour off the clear liquid as soon as possible after the last cup is required, and warm this gently in a pan for the late comers, if it does not boil, it will hardly be perceptible that it has been warmed up and not freshly made, and is much better for them than keeping it hot in the pot on the leaves.

Coffee.—This is a far more expensive drink than tea, for in England most people prefer it with plenty of milk. Allow two ounces of coffee for each pint of liquid required (this, again, is a much larger quantity) and the liquid may be all water, half milk and half water, or all milk; bring all slowly to the boil in a saucepan, with the coffee either in from cold or added when almost boiling, and allow to simmer for quite ten minutes. Strain through a fine sieve, or a piece of thin muslin, and leave to stand for half an hour. Pour off very gently, warm up, and serve. You will probably say: "What a lot of bother," so it is if you like good coffee. There are very fine "grounds" in coffee, which only settle slowly, like a fine mud, on the bottom of the jug, after you have strained it. If it does not stand these are still floating in the coffee and give it a raw taste. The longer it stands the better, so a good plan, if

you like coffee, is to make it the previous day and warm as required.

On the Continent coffee is a very popular drink, just as tea is in England. They make it in the way described, but use water only, no milk. They add sugar to drink it, but no milk, and call it "black coffee". I do not think you would like it after "white coffee" as ours is called with the milk in. The so-called "French" coffee sold in tins is a mixture of coffee and a root called chicory. It is much cheaper than coffee and goes with it well. Because the French peasants cannot afford pure coffee, they buy this adulterated with chicory, and from that we get the name, though the better class French people buy pure coffee. You can buy either in England, according to your taste and your purse. As with the tea, try several kinds before deciding which one you like the best, and find the most economical in use. For small children always serve very weak coffee, or they will not like it. Coffee has an advantage over tea in that it does not spoil by standing.

Cocoa.—This comes from a bean containing a lot of oil. Practically all the oil has to be squeezed out, because it is too heavy for us to digest, before the cocoa can be produced, but a very small amount is left in in spite of all care, and for this reason cocoa is always considered a more warmth-giving beverage than either tea or coffee. Cocoa is a substance which can be bought either loose or in tins put up by firms of well-known reputation. The quality of the product of these firms is beyond reproach for providing a smooth, delicious-tasting beverage, but that which is bought loose or in paper packets (without any "gift"

coupon in) is very very much cheaper, and practically as good. Cocoa is generally used very extravagantly, because people make it by the cup as required, scalding it in the cold cup. It is far nicer if all made together, allowing half a teaspoonful for each cup required, and gently boiled, and far more economical. This beverage, again, requires rather a lot of milk for most people, but as so very little cocoa is used it is not an extravagant beverage like coffee. Remember the really hot jug for serving it in. Another point in its favour is that, like coffee, it can stand indefinitely without spoiling, and be warmed as required. Very cheap cocoas are often thickened with a powdered starch, to give them "body"; if you suspect this change your cocoa and try another. A sure proof is to take a little to the chemist and ask him to put a little iodine on. If labelled pure cocoa, however, you will be quite safe, so just read the label on the packet.

Cold Beverages.—These are very numerous, the most popular being water and lemonade, for none surpass these two as real thirst-quenchers. With regard to serving these, always be as dainty as possible; for instance, if lemonade is served do not place the scalded lemons in the jug on the table, but strain the liquor off, and serve in a glass jug, if you have one, with a slice of thin lemon floating on the top. The sight of such a tempting jug is refreshing on a hot day. Give plenty of variety as the summer comes along by trying various fruit-juices done in the same way as a lemon, crushed or chopped, and scalded. Be sure that a drink intended to be a cold one really is so, and do not serve tepid drinks. Water

should be drawn when the meal is ready, and not before, and allow the tap to run before filling your jug.

SPECIAL CATERING PROBLEMS

Portable Meals.—A portable meal means one which is to be carried about, named from a French verb *porter* meaning "to carry". You will recognize that we use this word porter for a man who carries goods, either at a railway station or elsewhere, to make his living. If we use it in speaking of meals it covers every type from a picnic meal to a meal taken to business every day. If the meal is to be carried from home, it must be very carefully thought out, for there will be no opportunity for getting anything which has been forgotten, most probably.

The chief reasons for portable meals are :—

1. Isolated country districts used for picnics, etc. People like to wander about at will, and get far away from food supplies. Such meals are the jolliest we ever have.

2. People who live in the country and travel to business each day, and cannot afford to buy meals daily.

3. A restaurant is not always near enough to the business premises.

4. A short lunch hour does not allow for a meal off the premises.

5. It gives more time for the worker to rest in, if the food can be taken without going home in reasonable comfort.

6. People on special diet can keep to it more easily.

7. Individual taste can be studied.
8. It provides an opportunity for social intercourse with fellow workers.
9. For people who are travelling about all day.
10. People who must take long journeys and cannot afford meals on the train, car, boat, etc.

To cover so many requirements we can lay down quite a number of definite points which must be considered, and even then there will be others which must be applied individually.

The Person.—The kind of work they are engaged upon. A worker in the fields will require quite a different lunch from a worker in an office. The one will require plenty of energy giving foods ; the other brain stimulants, and lighter food.

Accommodation for Re-heating.—If the meal can be warmed the problem is much simpler than if no such facilities exist, and much more variety can be given, for frequently simple dishes can be cooked, such as a roast potato to go with the meat served.

Manner of Conveyance.—We must remember whether they are taking the meal with them, or if they are near enough to have it sent from home at the lunch hour. Remember to be *very* prompt if the meal is sent, for if too early the meal will go cold, and if too late the worker will probably have no leisure in which to enjoy it.

The Container.—This may be a handkerchief, a basket, or a case. Whichever is employed, it must be kept scrupulously clean. A basket should be scrubbed regularly, and a case lined with clean paper,

which can be changed when soiled. They should be large enough to pack conveniently, and yet not be bulky or heavy to carry.

Hot Meals.—These, if carried to the worker, must have very speedy dispatch and carriage ; do not linger on the way. The food container must be packed round with material to keep the heat in the food. We call such substances “ bad conductors ” of heat, because they are very slow at letting it pass through. Felt, flannel, newspaper, brown paper, wadding, are all bad conductors ; and the hot dish should be very tightly packed round with something of this sort before dispatching it.

The Food Receptacle.—Do not have heavy basins or thick pie dishes, but choose something which is light, unbreakable, and compact. Those in which the food can actually be cooked, if required, are very convenient. Save small tins, with well-fitting lids, for tea, salt, sugar, etc., if these are required. When placing corks or stoppers in bottles or flasks be sure they are clean and cannot flavour or spoil the contents. For instance, milk must not have a pickle cork put in the bottle, and a dirty milk cork from the previous day may turn the contents sour.

Implements.—Do not forget the knives, forks, and spoons, plates, corkscrew, tin opener, drinking cups, etc., if required. Paper picnic sets can be bought very cheaply, which add greatly to ease in consuming some foods for picnics or for daily lunch. They are very light to carry, and can be burnt when finished with.

The Meal.—

1. See that a well-balanced meal for the requirements of the person or persons is provided.

2. Consider what kind of meal will be taken later in the day.

3. Remember the season of the year.

4. The implements and accommodation for eating the meal. A picnic meal must be chiefly handy for eating with the fingers, whilst a business meal would allow for plates, knives, and forks.

5. If taken daily, give plenty of variety.

6. The liquids required. Either the dry tea or strong cordial only may be required, or the liquid may be required ready to drink hot or cold ; but under any conditions be sure the container cannot leak or be easily broken. Thermos flasks or cans with a wide cork stopper are the best.

7. Pack as daintily as possible in clean cloths or paper. Remember that bread sandwiches soon give a cloth a musty smell, which becomes very disagreeable to people who must take sandwiches almost every day, and it is sufficient to put them quite off the meal to have this odour. A clean cloth does not do this, or fresh paper.

8. If a picnic meal, try to have things well balanced, and not too much of one thing and insufficient of another, and provide on ample lines, for people always eat much more in the open air. In the sandwiches include really nourishing food—cheese, ham, tongue, meat, egg, all fulfill this requirement ; but such fillings as cress and jam are not sufficient by themselves. A few tomatoes to eat with the sandwiches are very refreshing, and not as indigestible as

cucumber. If tinned fruits can be purchased somewhere near the chosen spot, they make a very welcome addition on a hot day, but are too heavy to carry for a long distance. Do not forget to clear up your litter from unpacking, so that the next people to come along find the spot as pretty and as tempting as you did.

If these little points are carefully thought out, meals which are taken away from home can be almost as appetizing as those with all the advantages of home. So often the complaint is made by people who have to take lunch daily : " I never feel as though I want it, I get so sick of packed dinners," that every consideration should not be too much trouble to prevent it. Such a line leads to a thorough undermining of health, and is without doubt the cause of much sickness amongst growing girls.

THE VEGETARIAN

A vegetarian is a person who does not eat the flesh of animals, but uses the vegetable world to supply all the bodily requirements. Some people are vegetarians from principle, some because they find it agrees with them better than eating fish or meat, and some, undoubtedly, because they like to appear different from other people. If you have a person of this calling either to stay with you or in your family, the best thing to do is to get a good vegetarian cookery book, written by someone who thoroughly understands the subject, and there are plenty such about which any bookseller of repute will advise you on.

It will not be out of place here, however, to explain

that great care must be taken in practising vegetarianism, or a great deal of harm may be done. When you get on to the Dietetic section, you will learn the true food value of the various foods we eat, and you will see that the foods which repair the body and build the growing tissues are meat, fish, eggs, milk, cheese, peas, beans, and lentils. If meat, fish, and eggs are to be ruled out of the diet, our most concentrated body builders are ruled out at the same time. Those that are left in will certainly do the work, but they are not as good in quality for the purpose, and more must be taken to get the same amount of work done. This causes more work for the digestive system, and may be sufficient to cause illness and flatulence in many people. This can be overcome to some extent for healthy people by a careful study of the diet question. Where very much harm is done, is when people who do not know what they are talking about say they can live entirely on vegetables and mean potatoes, turnips, carrots, etc. In these there is practically nothing which can renew tissue in the body and do building work, and the body is forced to use up its own stores to carry on. A short course on these lines can do a great deal of harm. Even where the change is carefully thought out, it is not wise to change straight away from a meat diet to a vegetarian, let the change be gradual—say two meatless days a week to commence with, so that the body may become accustomed to its new form of food. One of the ablest exponents of vegetarianism is Mr. Eustace Miles, and he has written many books on the subject which should be carefully studied; for even a person who believes as firmly as he does in this form of food, urges people

to be careful how they try to turn over to it from a mixed dietary.

The vegetarians claim that such a diet is a cure for diseases caused through acidity in the blood, such as rheumatism, gout, etc., but they even go so far as to say it can cure corns, colds, and irritability !!! Such claims seem to require some investigation and do not sound quite as reasonable as they might.

Carefully considered, it is a cheaper diet than one in which meat or fish are required, and is more suitable probably for some seasons of the year, when we find all meals trying, and are glad of a change. For people who have to consider ways and means carefully, one or two days a week, at least, a meal with cheese as the main ingredient for one day, and peas, beans, or lentils as the chief ingredient for another, would be a great help to the family house-keeping purse, and a very healthy meal.

The Baby.—Such an important person as the baby really needs a small book to himself, but so many good books have been written already on the subject that here we are only concerned with him as he affects the person who is in charge in the kitchen. During the first six months of life a healthy baby doubles his weight, and by the end of twelve months he should be three times as heavy. He starts life as a quiet, sleepy little mortal, with next to no hair, and no interest in anything except food, but what a difference at the end of a year ! What a great deal his food has to do for him in every way to keep pace with such tremendous growth and development, so if his food is not right and he has indigestion after even one meal what a great deal more harm and

retarding of growth it can do than with anybody else. There is nothing to equal a mother's own milk for her baby, for the milk of a cow is intended for a baby cow and not for a baby boy or girl ; and so it stands to reason that if this has to be used every care must be taken to make up the vast difference. This part falls upon the person in the kitchen very often. They must see that the feeding apparatus (bottle, saucepan, jug, etc.) kept for baby is always scrupulously clean, and the food prepared must be kept at uniform strength. It will not do to put in too little at one bottle, and think you can add more at the next, and it will be quite all right. Every bottle must be exactly the right strength for the age of the baby. Another important point is that the feeding must be " by the clock ", absolutely regular, and this may be most inconvenient on a busy day ; but a little forethought and it can always be arranged. If the baby cries between feeding time, very often a drink of cool (not cold) boiled water will settle him off again. Baby suffers from thirst far more than people realize, for milk is not a thirst quencher as you know for yourself. If you know he is comfortably dressed, and healthy, do not pick him up at every cry, or nothing else will get done in the kitchen, for they are dreadful little people for liking to be petted, and if you can get it by screaming, why not ? Whatever you do, do *not* put a " comforter " in the mouth. Constant sucking is very harmful in many ways, and what a shame to spoil the shape of that lovely little mouth all for nothing. If you will give him the drink, if it is wanted, and talk to him in his pram, or whatever he is in, whilst you are busy, you can get on, and baby will be quite

happy too. Up to nine months of age nothing is required to keep the baby healthy but milk ; after that other foods must be gradually introduced, because milk is too bulky a food to give all we require to live upon after that date. Let the change be made very gradually, still keeping milk as the main thing. Taste the new food you are giving baby yourself, each time, not only to see that it is at the right temperature, but also to keep the same flavour each time, until baby has time to get used to a few new flavours in his food. If the baby has been breast-fed introduce a little strained orange or tomato juice, so that it does not miss the vitamins. Half a teaspoonful will be ample at first. The following foods are all suitable to introduce when the nine months are over :—

1. Milk puddings, made at first with ground grains rather than whole, e.g. ground rice, arrowroot, cornflour, semolina.

2. A teaspoonful of red gravy on a small piece of cauliflower, cabbage, or potato.

3. A teaspoonful of egg-yolk on a few crumbs of bread.

Baby can now be taught to drink from a cup, and grasp a spoon, but be very careful how you introduce these first foods, as the baby has not had to swallow consciously up to now, and finds it very difficult at first, and may be frightened. Start with the very softest of food before anything else is attempted.

From 12-18 Months.—

1. As before, but increasingly larger amounts will be required. Take care not to overfeed the baby ; it is more harmful than underfeeding.

2. Lightly boiled egg. Remove the shell entire, and give up to half an egg.

3. Small custard puddings.

4. A baked apple, with the skin and core carefully removed.

5. Thin bread and butter.

6. A tough, hard crust with which to exercise the jaws. This will often pacify a child that is teething, and keep it happy. Be sure it is a large piece so that they cannot possibly choke.

Insist on better table manners. A spoon should be tolerably well used at the end of this time, if the food provided is suitable, but little people soon get tired of effort, and do not expect the baby to feed itself without a deal of help. From the time of crawling onwards, the hands, and possibly the face, will require sponging before each meal; teach them to expect it. After a meal, always sponge the hands and mouth, for nothing is so repellent as to see a baby playing about with the remnants of the last meal all over the cheeks. Teach the child, now, to wear a feeder, and to expect it.

From 18-24 Months.—

1. Again, all the above in larger quantities.

2. Small amounts of well-broken fish flakes or finely minced chicken or rabbit. A child under two years of age is better without "red" meat, and must never have dried fish.

3. Light puddings of all types.

4. Biscuits, plain ones can be allowed now.

5. The orange juice can be substituted by small pieces of fresh fruit.

Still persist in teaching the baby how to use the

table utensils properly, and in a cleanly way. Even a baby will not make a mess for long if properly trained, and a little time put in now will be saved later on by the tablecloths alone.

Try to make them sit still for a few minutes after each meal for the food has time to start digesting, and it teaches a little self-control and manners.

After the age of two years they can take small portions of most foods which are light and easily digested. Always avoid rich foods for children, they are much healthier on plain diet. See that the child learns to eat properly, as Nature seems to intend them to stuff their little mouths as tightly as they can, unless you come to the rescue and watch very carefully.

Add to the help given here the intelligent use of a good cookery book, which will help you in getting the meals ready to time, and you will find catering is not nearly so difficult as you thought. The terrors which the thoughts of it first conjure up will disappear one by one, until you wonder why they ever existed, even though you may have to start catering for the family whilst very young, as some girls have to do owing to the illness or loss of mother, etc.

INDEX

Accessibility of the kitchen, 7
 Amount of food required, 111
 Amount to spend on food, 104
 An attractive kitchen, 8
 Animal foods, to buy, 82
 Antiseptics as preservatives, 98
 Arranging: Food, 117; the meals, 109; the meal times, 25; the menu, 110
 Attractive food, 116

Baby, feeding the, 140
 Bacon: Buying, 76; garnishing, 119
 Bacteria: Conditions for growth, 94; to check, 95
 Baking, 69
 Baking tins, 33
 Beef, choice of, 85
 Beverages, hot and cold, 129
 Birds, choice of, 88
 Boards, pastry, 32
 Boiled: Eggs, 60; fish, 62; meat, 61
 Boiling, 58
 Bones, stewed, 67
 Boracic Acid as a preservative, 98
 Bowls, choice of, 36
 Braising, 69
 Brass goods, 33
 Bread, 93; economy in, 108
 Breakfasts, 111
 Brushes, choice of, 36
 Bunsen flame, 16
 Bun tins, 33
 Burners: gas, 16; oil, 21
 Butter, storing, 92
 Buying: Animal foods, 82; baking powder, 76; birds,

88; biscuits, 76; butter, 76; candles, 76; cereals, 76; cheese, 77; cocoa, 77; dried fruits, 77; eggs, 77; flour, 79; fruit, 81; groceries, 75; jam, 79; milk, 80; nutmegs, 80; soap, 80; soda, 80; sugar, 80; tea, 80; tinned goods, 81; vegetables, 82

Cake tins, 49
 Cakes: Baking, 72; serving, 121
 Candles, buying, 76
 Care of the larder, 90
 Carving, 126; knives, 128
 Casseroles, 37
 Catering, 104; problems, 134
 Cereals, buying, 76
 Cheese: Buying, 77; how to use up, 109
 Children, feeding, 140
 Choice of: Beef, 85; bowls, 36; brushes, 36; china, 34; fish, 88; foreign meat, 84; fruit, 81; glass, 34; lamb, 86; meat, 83; mutton, 85; pork, 86; veal, 85; vegetables, 81; wooden articles, 35
 Clarifying dripping, 57
 Cleaning agents, economy in, 106
 Clocks, kitchen, 25
 Cloths, kitchen, 49
 Cocoa, 132; purchasing, 77
 Coffee, 131
 Cold as a preservative, 96
 Collanders, 37
 Comfort at the sink, 10
 Cook, definition of a, 3

- Cookers, pressure, 64
 Cookery: A skilled occupation, 4; haybox, 69
 Cooking: Importance of good, 2; mediums, 58; reasons for, 4; stoves, 11-25
 Copper goods, 33
 Correct height for sink, 10
 Curtains, kitchen, 9
 Cutters, 32

 Decorating a table, 123
 Definition of a cook, 3
 Digestion and meal times, 25
 Dining: Room, 122; table, 122
 Dish: cloths, 51; mops, 32
 Dishes, choice of, 37
 Distemping a kitchen, 8
 Doors in the kitchen, 7
 Double saucepans, 38
 Drains, kitchen, 9
 Dredgers, flour, 38
 Dresser, kitchen, 28
 Dried: fish, 90; fruits, buying, 77; parsley, 121
 Dripping, to clarify, 57
 Drying as a preservative, 97
 Dusters, 51
 Dutch ovens, 55

 Earthenware, 34; for stewing, 68
 Economy in: Bread, 108; coal, 14; fish, 109; fuel, 106; meat, 109; milk, 108; the kitchen, 106
 Edible offal, use of, 86
 Eggs: Boiling, 60; buying, 77; preserving, 78; whisks, 38
 Electric stoves, 19
 Enamel goods, 33
 Equipment, table, 124
 Equipping the kitchen, 7
 Exclusion of air as a preservative, 97

 Feeding children, 140
 Fireless cookers, 23

 Fish, 88; baking, 72; boiled, 61; choice of, 88; dried, 90; economic use of, 109; garnishing, 119; shell, 90; slice, 38; steamed, 66
 Floor: Cloths, 52; mops, 41
 Floors, suitable kitchen, 8
 Flour dredgers, 38
 Flour, to buy, 57
 Food: Amount required, 111; amount to spend on, 104; arranging, 117; causes of decay, 94; importance of appearance, 5; importance of flavour, 5; need for good, 3; old ideas of, 3; poisoning, 102; preservation of, 93; serving, 116; tinned, 99; uncooked, 73
 Foreign meat, 84
 Forks, 38
 Formalin, as a preservative, 98
 Fresh fruits, garnishing, 120
 Fruits: Baking, 71; boiling, 59; steamed, 65; stewed, 68; storing, 92; to buy, 81
 Frying, 55
 Frying pans, 39
 Fuel, economy in, 106
 Funnels, 39
 Furnishing the kitchen, 25

 Garnishing, 116; bacon or ham, 119; cold joints, 119; fish, 119; fresh fruits, 120; hot joints, 119; salads, 120; soups, 119; vegetables, 119
 Gas burner and how it works, 16; ovens, 17
 Gas oven: Shelves, 17; to clean, 70
 Gas stoves, 15
 Glass: Choice of, 34; for stewing, 68; "Pyrex," 68
 Good cooking, importance of, 2
 Goods: Aluminium, 33; brass, 33; china, 34; copper, 33;

earthenware, 34 ; enamel, 33 ;
 iron, 33 ; tin, 32 ; wooden, 35
 Graters, 39
 Gravy strainers, 48
 Grillings, 54
 Groceries, buying, 75

 Ham, garnishing, 119
 Haybox, 23 ; cookery, 69
 Hearthrug, kitchen, 31
 Heat as a preservative, 97

 Icing sets, 39
 Importance of : Attractive food,
 5 ; flavour, 5 ; good cooking,
 2
 Infusions, 60
 Internal organs as food, 86
 Iron goods, 33

 Jam, to buy, 79
 Jelly moulds, 40
 Joints, garnishing, 121
 Jugs, 40

 Kitchen : Accessibility of, 7 ;
 an attractive, 8 ; apparatus,
 31 ; cabinets, 29 ; chairs, 30 ;
 clock, 25 ; cloths, 49 ;
 cupboards, 29 ; curtains, 9 ;
 distempering, 8 ; doors, 7 ;
 drains, 9 ; dresser, 28 ;
 economy in the, 106 ; equip-
 ping, 7 ; floors, types of,
 8 ; furniture, 25 ; hearthrug,
 31 ; lighting the, 6 ; position of,
 6 ; ranges, 11-25 ; sink, 10 ;
 steps and the, 7 ; tables, 26 ;
 the ideal, 6 ; towels, choice and
 care of, 49 ; utensils required,
 32 ; ventilation, 6 ; wood-
 work, 8
 Knives, carving, 128

 Labour savers, 52
 Lamb, choice of, 86
 Larder, care of, 90

Laying a table, 123
 Lemon squeezer, 40
 Lighting of the kitchen, 6

 Marketing, 73
 Meal times and digestion, 25
 Meals : Arrangement of, 109 ;
 necessity for regularity, 25 ;
 portable, 134
 Measures, 40
 Meat : Baking, 72 ; boiling, 61 ;
 choice of, 83 ; economy in the
 use of, 109 ; foreign, 84 ;
 salted, 86 ; steaming, 60 ;
 stewing, 67
 Mediums, cooking, 58
 Menu, arrangement of, 110
 Metals, 33
 Methods of : Cooking, 54 ;
 preservation, 93
 Midday meals, 113
 Milk : Economy in the use of,
 108 ; storing, 92 ; to buy, 80
 Mincing machines, 40
 Modern kitchen ranges, 11-25
 Mops, dish and floor, 41
 Mould, 96
 Moulds, jelly, 40
 Mutton, choice of, 85

 Necessity for : Good food, 2 ;
 regular meals, 25
 Nutmegs, to buy, 80

 Offal, edible, uses of, 86
 Oil stoves, 21 ; baking sheets,
 22
 Oils to preserve eggs, 79
 Olden ideas of food, 2
 Oven cloths, 51
 Ovens : Coal, 12 ; Dutch, 55 ;
 electric, 19 ; gas, 15 ; oil, 21

 Parsley, dried, 121
 Pails, 41
 Pastry boards, 32
 Pie dishes, 41

- Pies, serving, 121
 Plates, 41
 Plate racks, 10
 Poisoning, food, 102
 Pork, choice of, 86
 Portable meals, 134
 Position of the kitchen, 6
 Potato : Mashers, 42 ; peelers, 42
 Preservation, 93 ; by anti-septics, 98 ; boracic acid, 98 ; cold, 96 ; drying, 97 ; exclusion of air, 97 ; formalin, 98 ; heat, 97 ; salicylic acid, 98 ; salt, 98 ; smoke, 98 ; sugar, 98 ; vinegar, 98
 Preserving : Eggs, 77 ; pans, 42
 Pressure cookers, 64
 Puddings : Baking, 71 ; boiling, 60 ; serving, 121 ; steaming, 65
 Pyrex dishes, 68

 Range, coal, 12
 Reasons for cooking, 4
 Rest period, morning, 30
 Roasting, 54 ; tins, 49
 Rolling pins, 43

 Salads, garnishing, 120
 Salicylic acid, 98
 Salt as a preservative, 98
 Salted meat, 86
 Sauces, 59
 Saucepan brushes, 36
 Saucepans, 43
 Saucepans, double, 37
 Scales, 45
 Scissors, 46
 Scrubbing brushes, 36
 Serving : Cakes, 121 ; food, 116 ; pies, 121 ; puddings, 121
 Shell fish, 90
 Sieves, 46
 Simmering point, 62

 Sinks, 10 ; comfort at the, 10 ; correct height for, 10 ; draining boards, 11 ; ideal, 10 ; kitchen, 10 ; taps, 10
 Smoke as a preservative, 98
 Soap, to buy, 80
 Soda, to buy, 80
 Soups, garnishing, 119
 Special catering problems, 134
 Spoons, 46
 Spores, 95
 Steamers, 47
 Steaming, 62
 Steps in a kitchen, 7
 Stewing, 66
 Stewpots, 48
 Storing, 90 ; bread, 93 ; butter, 92 ; fruit, 92 ; milk, 92 ; vegetables, 92
 Stoves, 11-25
 Strainers, 48
 Sugar : As a preservative, 98 ; to buy, 80
 Suppers, 115
 Syrups, boiling, 59

 Table : Decorations, 123 ; kitchen, 26 ; laying the, 123 ; mangles, 28 ; trolley, 28
 Taps, kitchen, 10
 Tea, 130 ; to buy, 80
 Teas, 114
 The dining room, 122 ; dining table, 122 ; Dutch oven, 55 ; ideal kitchen, 6 ; midday meal, 113 ; morning rest period, 30
 Tinned : Foods, 81, 99 ; goods, 81
 Tin openers, 49
 To clarify dripping, 57
 To preserve eggs, 77
 Towels, kitchen, 49
 Triplex stoves, 12
 Trolley tables, 28
 Types of kitchen floors, 8

- Uncooked foods, 73
Use of : Edible offal, 86 ; water
glass to preserve eggs, 78 ;
wax to preserve eggs, 78
Utensils, kitchen, 24
Veal, choice of, 85
Vegetables : Baking, 71 ; boil-
ing, 59 ; buying, 81 ; garnish-
ing, 119 ; steaming, 64 ;
stewing, 68 ; storing, 92
Vegetarians, 138
Ventilation of the kitchen, 6
Vinegar as a preservative, 98
Water glass for preserving eggs,
78
Whisks, 38
Wooden articles, 35
Yeast, 95